```
Cys Arg Val Ala Arg Xaa Gly Gln Asp Trp Pro Ala Ala Ser Pro Gly
              20              25              30

Val Asn Leu Arg Asn Xaa Phe Xaa Pro Pro Leu Leu Leu Ala Pro Val
              35              40              45

Pro Thr Pro Val Ala Pro Ser Leu Gly Ser Pro Leu Leu Leu Ser His
       50              55              60

Pro Glu Arg Gln Ser Gly Pro Val Thr Gly Gly Ala Gly Glu Gly His
   65              70              75              80

Arg Cys Ala Ser Pro Gln Thr Val Cys Gln Val Ser Glu Leu Val Thr
              85              90              95

Arg Pro Ala Ala Gln Pro Ser Ala Ala Ala Gln Pro Ala Ala Pro Ala
              100             105             110

Gly Gly Arg Thr Pro Gly Arg Ala Gly Pro His Leu Pro Ile Tyr Lys
              115             120             125

Ile Gly Gln Gly Asn Met Lys Ala Asp Leu Gln Ala Ala Ala Thr Ala
   130             135             140

Lys Pro Gly Lys Ser Gln Gln
145             150
```

```
<210> 1145
<211> 70
<212> PRT
<213> Homo sapiens

<400> 1145
Ala Asp Ile Ala Gly Val Leu Ala Ile Arg Pro Asp Glu Leu Arg Phe
   1               5               10              15

Arg Tyr Ser Met Val Ala Tyr Trp Arg Gln Ala Gly Leu Ser Tyr Ile
              20              25              30

Arg Tyr Ser Gln Ile Cys Ala Lys Ala Val Arg Asp Ala Leu Lys Thr
              35              40              45

Glu Phe Lys Ala Asn Ala Glu Lys Thr Ser Gly Ser Asn Val Lys Ile
       50              55              60

Val Lys Val Lys Lys Glu
   65              70
```

```
<210> 1146
<211> 166
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1146
Leu His Ala Asn Gln Val Ile His Arg Asp Ile Lys Ser Asp Asn Val
 1               5                   10                  15

Leu Leu Gly Met Glu Gly Ser Val Lys Leu Thr Asp Phe Gly Phe Cys
            20                  25                  30

Ala Gln Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr
            35                  40                  45

Pro Tyr Trp Met Ala Pro Glu Xaa Val Thr Arg Lys Ala Tyr Gly Pro
    50                  55                  60

Lys Val Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Val Glu
65              70                  75                  80

Gly Glu Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu
            85                  90                  95

Ile Ala Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser
            100                 105                 110

Pro Ile Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu
            115                 120                 125

Lys Arg Gly Ser Ala Lys Glu Leu Leu Gln His Pro Phe Leu Lys Leu
    130                 135                 140

Ala Lys Pro Leu Ser Ser Leu Thr Pro Leu Ile Met Ala Ala Lys Glu
145                 150                 155                 160

Ala Met Lys Ser Asn Arg
                165


<210> 1147
<211> 420
<212> PRT
<213> Homo sapiens
```

<220>
<221> SITE
<222> (203)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1147
Cys Pro Pro Phe Ser Val Arg Val Pro Pro Trp Ala Gly Leu Ala Leu
 1   5   10   15

Leu Pro Ser Pro Ser Leu Met Ala Leu Leu Arg Arg Pro Thr Val Ser
            20   25   30 ,

Ser Asp Leu Glu Asn Ile Asp Thr Gly Val Asn Ser Lys Val Lys Ser
            35   40   45

His Val Thr Ile Arg Arg Thr Val Leu Glu Glu Ile Gly Asn Arg Val
        50   55   60

Thr Thr Arg Ala Ala Gln Val Ala Lys Lys Ala Gln Asn Thr Lys Val
65   70   75   80

Pro Val Gln Pro Thr Lys Thr Thr Asn Val Asn Lys Gln Leu Lys Pro
                85   90   95

Thr Ala Ser Val Lys Pro Val Gln Met Glu Lys Leu Ala Pro Lys Gly
            100   105   110

Pro Ser Pro Thr Pro Glu Asp Val Ser Met Lys Glu Glu Asn Leu Cys
            115   120   125

Gln Ala Phe Ser Asp Ala Leu Leu Cys Lys Ile Glu Asp Ile Asp Asn
    130   135   140

Glu Asp Trp Glu Asn Pro Gln Leu Cys Ser Asp Tyr Val Lys Asp Ile
145   150   155   160

Tyr Gln Tyr Leu Arg Gln Leu Glu Val Leu Gln Ser Ile Asn Pro His
            165   170   175

Phe Leu Asp Gly Arg Asp Ile Asn Gly Arg Met Arg Ala Ile Leu Val
            180   185   190

Asp Trp Leu Val Gln Val His Ser Lys Phe Xaa Leu Leu Gln Glu Thr
            195   200   205

Leu Tyr Met Cys Val Gly Ile Met Asp Arg Phe Leu Gln Val Gln Pro
    210   215   220

Val Ser Arg Lys Lys Leu Gln Leu Val Gly Ile Thr Ala Leu Leu Leu
225   230   235   240

```
Ala Ser Lys Tyr Glu Glu Met Phe Ser Pro Asn Ile Glu Asp Phe Val
             245             250             255

Tyr Ile Thr Asp Asn Ala Tyr Thr Ser Ser Gln Ile Arg Glu Met Glu
             260             265             270

Thr Leu Ile Leu Lys Glu Leu Lys Phe Glu Leu Gly Arg Pro Leu Pro
         275             280             285

Leu His Phe Leu Arg Arg Ala Ser Lys Ala Gly Glu Val Asp Val Glu
     290             295             300

Gln His Thr Leu Ala Lys Tyr Leu Met Glu Leu Thr Leu Ile Asp Tyr
305             310             315             320

Asp Met Val His Tyr His Pro Ser Lys Val Ala Ala Ala Ala Ser Cys
             325             330             335

Leu Ser Gln Lys Val Leu Gly Gln Gly Lys Trp Asn Leu Lys Gln Gln
         340             345             350

Tyr Tyr Thr Gly Tyr Thr Glu Asn Glu Val Leu Glu Val Met Gln His
         355             360             365

Met Ala Lys Asn Val Val Lys Val Asn Glu Asn Leu Thr Lys Phe Ile
     370             375             380

Ala Ile Lys Asn Lys Tyr Ala Ser Ser Lys Leu Leu Lys Ile Ser Met
385             390             395             400

Ile Pro Gln Leu Asn Ser Lys Ala Val Lys Asp Leu Ala Ser Pro Leu
             405             410             415

Ile Gly Arg Ser
             420
```

<210> 1148
<211> 249
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (244)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1148
Gln Ser Asn Ala Val Trp Leu Leu Gly His Leu His Leu Ser Thr Leu

1157

```
     1                    5                     10                     15

   Ser Ser Ser Gln Ser Arg Ala Ser Val Pro Thr Asp Tyr Ser Tyr Leu
               20              25              30

   Pro Glu Ser Ser Phe Ile Gly Ala Ala Ile Gly Phe Phe Ile Thr Gly
               35              40              45

   Gly Lys Lys Gly Pro Glu Ser Val Pro Pro Ser Leu Leu Lys Val Val
       50              55              60

   Met Lys Pro Ile Ala Thr Val Gly Glu Ser Tyr Gln Tyr Pro Pro Val
   65              70              75              80

   Asn Trp Ala Ala Leu Leu Ser Pro Leu Met Arg Leu Asn Phe Gly Glu
                   85              90              95

   Glu Ile Gln Gln Leu Cys Leu Glu Ile Met Val Thr Gln Ala Gln Ser
               100             105             110

   Ser Gln Asn Ala Ala Ala Leu Leu Gly Leu Trp Val Thr Pro Pro Leu
               115             120             125

   Ile His Ser Leu Ser Leu Asn Thr Lys Arg Tyr Leu Leu Ile Ser Ala
               130             135             140

   Pro Leu Trp Ile Lys His Ile Ser Asp Glu Gln Ile Leu Gly Phe Val
   145             150             155             160

   Glu Asn Leu Met Val Ala Val Phe Lys Ala Ala Ser Pro Leu Gly Ser
                   165             170             175

   Pro Glu Leu Cys Pro Ser Ala Leu His Gly Leu Ser Gln Ala Met Lys
               180             185             190

   Leu Pro Ser Pro Ala His His Leu Trp Ser Leu Leu Ser Glu Ala Thr
               195             200             205

   Gly Lys Ile Phe Asp Leu Leu Pro Asn Lys Ile Arg Arg Lys Asp Leu
       210             215             220

   Glu Leu Tyr Ile Ser Ile Ala Lys Cys Leu Leu Glu Met Thr Asp Asp
   225             230             235             240

   Asp Ala Asn Xaa Asp Arg Pro Gly Tyr
               245
```

<210> 1149
<211> 239

1158

<212> PRT
<213> Homo sapiens

<400> 1149
Arg Asp Pro Pro Arg Pro Val Gln Ser Gly Leu Gly Ala Ala Gly Thr
 1   5   10   15

Leu Ser Trp Leu Pro Pro Pro Glu Gln Pro Val Leu Val Pro Arg Leu
                20   25   30

Pro Ala Pro Arg Pro Val Met Thr Leu Arg Pro Ser Leu Leu Pro Leu
        35   40   45

His Leu Leu Leu Leu Leu Leu Leu Ser Ala Ala Val Cys Arg Ala Glu
     50   55   60

Ala Gly Leu Glu Thr Glu Ser Pro Val Arg Thr Leu Gln Val Glu Thr
65   70   75   80

Leu Val Glu Pro Pro Glu Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp
                85   90   95

Thr Leu His Ile His Tyr Thr Gly Ser Leu Val Asp Gly Arg Ile Ile
            100   105   110

Asp Thr Ser Leu Thr Arg Asp Pro Leu Val Ile Glu Leu Gly Gln Lys
        115   120   125

Gln Val Ile Pro Gly Leu Glu Gln Ser Leu Leu Asp Met Cys Val Gly
    130   135   140

Glu Lys Arg Arg Ala Ile Ile Pro Ser His Leu Ala Tyr Gly Lys Arg
145   150   155   160

Gly Phe Pro Pro Ser Val Pro Ala Asp Ala Val Val Gln Tyr Asp Val
                165   170   175

Glu Leu Ile Ala Leu Ile Arg Ala Asn Tyr Trp Leu Lys Leu Val Lys
            180   185   190

Gly Ile Leu Pro Leu Val Gly Met Ala Met Val Pro Ala Leu Leu Gly
            195   200   205

Leu Ile Gly Tyr His Leu Tyr Arg Lys Ala Asn Arg Pro Lys Val Ser
    210   215   220

Lys Lys Lys Leu Lys Glu Glu Lys Arg Asn Lys Ser Lys Lys Lys
225   230   235

```
<210> 1150
<211> 394
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1150
Ala Glu Xaa Gly Lys Thr Glu Trp Leu Phe Gly Met Asp Glu Gly Arg
  1               5                  10                  15


Lys Gln Leu Ala Ala Ser Ala Gly Phe Arg Arg Leu Ile Thr Val Ala
                20                  25                  30


Leu His Arg Gly Gln Gln Tyr Glu Ser Met Asp His Ile Gln Ala Glu
            35                  40                  45


Leu Ser Ala Arg Val Met Glu Leu Ala Pro Ala Gly Met Pro Thr Gln
        50                  55                  60


Gln Gln Val Pro Phe Leu Ser Val Gly Gly Asp Ile Gly Val Arg Thr
 65                  70                  75                  80


Val Gln His Gln Asp Cys Ser Pro Leu Ser Gly Asp Tyr Val Ile Glu
                85                  90                  95


Asp Val Gln Gly Asp Asp Lys Arg Tyr Phe Arg Arg Leu Ile Phe Leu
                100                 105                 110


Ser Asn Arg Asn Val Val Gln Ser Glu Ala Arg Leu Leu Lys Asp Val
            115                 120                 125


Ser His Lys Ala Gln Lys Lys Arg Lys Lys Asp Arg Lys Lys Gln Arg
        130                 135                 140


Pro Ala Asp Ala Glu Asp Leu Pro Ala Ala Pro Gly Gln Ser Ile Asp
145                 150                 155                 160


Lys Ser Tyr Leu Cys Cys Glu His His Lys Ala Met Ile Ala Gly Leu
                165                 170                 175


Ala Leu Leu Arg Asn Pro Glu Leu Leu Leu Glu Ile Pro Leu Ala Leu
            180                 185                 190


Leu Val Val Gly Leu Gly Gly Gly Ser Leu Pro Leu Phe Val His Asp
            195                 200                 205


His Phe Pro Lys Ser Cys Ile Asp Ala Val Glu Ile Asp Pro Ser Met
```

1160

```
        210                 215                 220

Leu Glu Val Ala Thr Gln Trp Phe Gly Phe Ser Gln Ser Asp Arg Met
225                 230                 235                 240

Lys Val His Ile Ala Asp Gly Leu Asp Tyr Ile Ala Ser Leu Ala Gly
                245                 250                 255

Gly Gly Glu Ala Arg Pro Cys Tyr Asp Val Ile Met Phe Asp Val Asp
                260                 265                 270

Ser Lys Asp Pro Thr Leu Gly Met Ser Cys Pro Pro Pro Ala Phe Val
        275                 280                 285

Glu Gln Ser Phe Leu Gln Lys Val Lys Ser Ile Leu Thr Pro Glu Gly
        290                 295                 300

Val Phe Ile Leu Asn Leu Val Cys Arg Asp Leu Gly Leu Lys Asp Ser
305                 310                 315                 320

Val Leu Ala Gly Leu Lys Ala Val Phe Pro Leu Leu Tyr Val Arg Arg
                325                 330                 335

Ile Glu Gly Glu Val Asn Glu Ile Leu Phe Cys Gln Leu His Pro Glu
                340                 345                 350

Gln Lys Leu Ala Thr Pro Glu Leu Leu Glu Thr Ala Gln Ala Leu Glu
        355                 360                 365

Arg Thr Leu Arg Lys Pro Gly Arg Gly Trp Asp Asp Thr Tyr Val Leu
        370                 375                 380

Ser Asp Met Leu Lys Thr Val Lys Ile Val
385                 390
```

```
<210> 1151
<211> 111
<212> PRT
<213> Homo sapiens

<400> 1151
Val Asn Val Asn Asn Pro Ser Leu Cys His Ser Ser His Leu Val Asp
1                   5                   10                  15

Leu Gly Ser Gly Ser Val Glu Phe Cys Ala Trp Glu Trp Ser Trp Arg
                20                  25                  30

Glu Trp Gly Leu Cys Thr Ala Ala Thr Ser Pro Arg Ser Ser His Leu
        35                  40                  45
```

```
        Pro Ala Pro Arg Pro Gly Cys Met Ala Ala Pro Val Cys Val Gln Arg
            50                  55                  60

        Ser Val Ser His Pro Leu His Leu Leu Ser Gly Gly Leu Gly Ser Pro
            65                  70                  75                  80

        Thr Cys Cys Gln Asp Leu Gly Ala Ile Lys Tyr Ser Gly Phe Val Lys
                        85                  90                  95

        Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
                    100                 105                 110
```

<210> 1152
<211> 172
<212> PRT
<213> Homo sapiens

<400> 1152
```
        Leu Gly Asp Thr Ile Glu Gly Arg Leu Gln Val Pro Val Arg Asn Ser
         1               5                  10                  15

        Arg Val Asp Pro Arg Val Arg Ala Arg Gly Ala Asp Arg Met Gly Lys
                    20                  25                  30

        Cys Arg Gly Leu Arg Thr Ala Arg Lys Leu Arg Ser His Arg Arg Asp
                    35                  40                  45  ·

        Gln Lys Trp His Asp Lys Gln Tyr Lys Lys Ala His Leu Gly Thr Ala
            50                  55                  60

        Leu Lys Ala Asn Pro Phe Gly Gly Ala Ser His Ala Lys Gly Ile Val
            65                  70                  75                  80

        Leu Glu Lys Val Gly Val Glu Ala Lys Gln Pro Asn Ser Ala Ile Arg
                        85                  90                  95

        Lys Cys Val Arg Val Gln Leu Ile Lys Asn Gly Lys Lys Ile Thr Ala
                    100                 105                 110

        Phe Val Pro Asn Asp Gly Cys Leu Asn Phe Ile Glu Glu Asn Asp Glu
                    115                 120                 125

        Val Leu Val Ala Gly Phe Gly Arg Lys Gly His Ala Val Gly Asp Ile
            130                 135                 140

        Pro Gly Val Arg Phe Lys Val Val Lys Val Ala Asn Val Ser Leu Leu
        145                 150                 155                 160
```

```
Ala Leu Tyr Lys Gly Lys Lys Glu Arg Pro Arg Ser
              165                 170
```

```
<210> 1153
<211> 197
<212> PRT
<213> Homo sapiens
```

```
<400> 1153
Tyr Trp Cys Glu Gln Cys Asp Val Gln Phe Ser Ser Ser Ser Glu Leu
 1               5                 10               15

Tyr Leu His Phe Gln Glu His Ser Cys Asp Glu Gln Tyr Leu Cys Gln
            20              25              30

Phe Cys Glu His Glu Thr Asn Asp Pro Glu Asp Leu His Ser His Val
         35              40              45

Val Asn Glu His Ala Cys Lys Leu Ile Glu Leu Ser Asp Lys Tyr Asn
     50              55              60

Asn Gly Glu His Gly Gln Tyr Ser Leu Leu Ser Lys Ile Thr Phe Asp
 65              70              75              80

Lys Cys Lys Asn Phe Phe Val Cys Gln Val Cys Gly Phe Arg Ser Arg
               85              90              95

Leu His Thr Asn Val Asn Arg His Val Ala Ile Glu His Thr Lys Ile
         100             105             110

Phe Pro His Val Cys Asp Asp Cys Gly Lys Gly Phe Ser Ser Met Leu
         115             120             125

Glu Tyr Cys Lys His Leu Asn Ser His Leu Ser Glu Gly Ile Tyr Leu
     130             135             140

Cys Gln Tyr Cys Glu Tyr Ser Thr Gly Gln Ile Glu Asp Leu Lys Ile
145             150             155             160

His Leu Asp Phe Lys His Ser Ala Asp Leu Pro His Lys Cys Ser Asp
            165             170             175

Cys Leu Met Arg Phe Gly Asn Glu Arg Glu Leu Ile Ser His Leu Pro
            180             185             190

Val His Glu Thr Thr
         195
```

<210> 1154
<211> 156
<212> PRT
<213> Homo sapiens

<400> 1154
Pro Ala Lys Glu Arg Arg Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser
 1   5   10   15

Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Gly
            20   25   30

Ser Ser Ser Ser Asp Ser Glu Gly Ser Ser Leu Pro Val Gln Pro Glu
            35   40   45

Val Ala Leu Lys Arg Val Pro Ser Pro Thr Pro Ala Pro Lys Glu Ala
    50   55   60

Val Arg Glu Gly Arg Pro Pro Glu Pro Thr Pro Ala Lys Arg Lys Arg
65   70   75   80

Arg Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser
                85   90   95

Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser
            100   105   110

Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Pro Ser Pro Ala Lys
            115   120   125

Pro Gly Pro Gln Ala Cys Pro Asn Leu Gln Ala Pro Arg Ser His Pro
    130   135   140

Leu Ala Ser Gly Gly Pro Ala Ala Pro Gly Ser Gln
145   150   155

<210> 1155
<211> 125
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1155
Pro Glu Ala Pro Arg Gly Val Val Thr Cys Leu Arg Ala Leu Leu Ser
 1   5   10   15

His Gln His Gln Thr Arg Pro His Arg Val Pro Gly Thr Met Phe Gly
            20   25   30

Lys Arg Lys Lys Arg Val Glu Ile Ser Ala Pro Ser Asn Phe Glu His
        35   40   45

Arg Val His Thr Gly Phe Asp Gln His Glu Gln Lys Phe Thr Gly Leu
    50   55   60

Pro Arg Gln Trp Gln Ser Leu Ile Xaa Glu Ser Ala Arg Arg Pro Lys
65   70   75   80

Pro Leu Val Asp Pro Ala Cys Ile Thr Ser Ile Gln Pro Gly Ala Pro
            85   90   95

Lys Thr Ile Val Arg Gly Ser Lys Xaa Ala Lys Asp Gly Ala Leu Thr
            100   105   110

Leu Leu Leu Asp Glu Phe Glu Asn Met Xaa Val Thr Arg
            115   120   125

<210> 1156
<211> 202
<212> PRT
<213> Homo sapiens

<400> 1156
Arg Pro Thr Arg Pro Gln Pro Ser Pro Asp Glu Ala Arg Pro Leu Gln
 1   5   10   15

Ala Leu Leu Asp Gly Arg Gly Leu Cys Val Asn Ala Ser Ala Val Ser
            20   25   30

Arg Leu Arg Ala Tyr Leu Leu Pro Ala Pro Pro Ala Pro Gly Asn Ala
        35   40   45

Ser Glu Ser Glu Glu Asp Arg Ser Ala Gly Ser Val Glu Ser Pro Ser

```
            50                    55                    60

    Val Ser Ser Thr His Arg Val Ser Asp Pro Lys Phe His Pro Leu His
    65                    70                    75                    80

    Ser Lys Ile Ile Ile Ile Lys Lys Gly His Ala Lys Asp Ser Gln Arg
                        85                    90                    95

    Tyr Lys Val Asp Tyr Glu Ser Gln Ser Thr Asp Thr Gln Asn Phe Ser
                100                   105                   110

    Ser Glu Ser Lys Arg Glu Thr Glu Tyr Gly Pro Cys Arg Arg Glu Met
                115                   120                   125

    Glu Asp Thr Leu Asn His Leu Lys Phe Leu Asn Val Leu Ser Pro Arg
                130                   135                   140

    Gly Val His Ile Pro Asn Cys Asp Lys Lys Gly Phe Tyr Lys Lys Lys
    145                   150                   155                   160

    Gln Cys Arg Pro Ser Lys Gly Arg Lys Arg Gly Phe Cys Trp Cys Val
                    165                   170                   175

    Asp Lys Tyr Gly Gln Pro Leu Pro Gly Tyr Thr Thr Lys Gly Lys Glu
                    180                   185                   190

    Asp Val His Cys Tyr Ser Met Gln Ser Lys
                195                   200
```

<210> 1157
<211> 269
<212> PRT
<213> Homo sapiens

<400> 1157
```
    Arg Arg Cys Cys His Ser Ala Thr Met Phe Glu Ala Arg Leu Val Gln
    1               5                   10                  15

    Gly Ser Ile Leu Lys Lys Val Leu Glu Ala Leu Lys Asp Leu Ile Asn
                20                  25                  30

    Glu Ala Cys Trp Asp Ile Ser Ser Ser Gly Val Asn Leu Gln Ser Met
                35                  40                  45

    Asp Ser Ser His Val Ser Leu Val Gln Leu Thr Leu Arg Ser Glu Gly
        50                  55                  60

    Phe Asp Thr Tyr Arg Cys Asp Arg Asn Leu Ala Met Gly Val Asn Leu
    65                  70                  75                  80
```

```
Thr Ser Met Ser Lys Ile Leu Lys Cys Ala Gly Asn Glu Asp Ile Ile
                85                  90                  95

Thr Leu Arg Ala Glu Asp Asn Ala Asp Thr Leu Ala Leu Val Phe Glu
            100             105             110

Ala Pro Asn Gln Glu Lys Val Ser Asp Tyr Glu Met Lys Leu Met Asp
        115             120             125

Leu Asp Val Glu Gln Leu Gly Ile Pro Glu Gln Glu Tyr Ser Cys Val
    130             135             140

Val Lys Met Pro Ser Gly Glu Phe Ala Arg Ile Cys Arg Asp Leu Ser
145             150             155             160

His Ile Gly Asp Ala Val Val Ile Ser Cys Ala Lys Asp Gly Val Lys
            165             170             175

Phe Ser Ala Ser Gly Glu Leu Gly Asn Gly Asn Ile Lys Leu Ser Gln
        180             185             190

Thr Ser Asn Val Asp Lys Glu Glu Glu Ala Val Thr Ile Glu Met Asn
    195             200             205

Glu Pro Val Gln Leu Thr Phe Ala Leu Arg Tyr Leu Asn Phe Phe Thr
    210             215             220

Lys Ala Thr Pro Leu Ser Ser Thr Val Thr Leu Ser Met Ser Ala Asp
225             230             235             240

Val Pro Leu Val Val Glu Tyr Lys Ile Ala Asp Met Gly His Leu Lys
            245             250             255

Tyr Tyr Leu Ala Pro Lys Ile Glu Asp Glu Glu Gly Ser
            260             265
```

<210> 1158
<211> 639
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

1167

```
<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1158
Met Asp Glu Met Ala Thr Thr Gln Ile Ser Lys Asp Glu Leu Asp Glu
 1               5                   10                  15

Leu Lys Glu Ala Phe Ala Lys Val Asp Leu Asn Ser Asn Gly Phe Ile
               20                  25                  30

Cys Asp Tyr Glu Leu His Glu Leu Phe Lys Glu Ala Asn Met Pro Leu
           35                  40                  45

Pro Gly Tyr Lys Val Arg Glu Ile Ile Gln Lys Leu Met Leu Asp Gly
       50                  55                  60

Asp Arg Asn Lys Asp Gly Lys Ile Ser Phe Asp Glu Phe Val Tyr Ile
65                  70                  75                  80

Phe Gln Glu Val Lys Ser Ser Asp Ile Ala Lys Thr Phe Arg Lys Ala
               85                  90                  95

Ile Asn Arg Lys Glu Gly Ile Cys Ala Leu Gly Gly Thr Ser Glu Leu
           100                 105                 110

Ser Ser Glu Gly Thr Gln His Ser Tyr Ser Glu Glu Glu Lys Tyr Ala
           115                 120                 125

Xaa Val Asn Trp Ile Asn Lys Ala Leu Glu Asn Asp Pro Asp Cys Arg
   130                 135                 140

His Val Ile Pro Met Xaa Pro Asn Thr Asp Asp Leu Phe Lys Ala Val
145                 150                 155                 160

Gly Asp Gly Ile Val Leu Cys Lys Met Ile Asn Leu Ser Val Pro Asp
               165                 170                 175

Thr Ile Asp Glu Arg Ala Ile Asn Lys Lys Lys Leu Thr Pro Phe Ile
               180                 185                 190

Ile Gln Glu Asn Leu Asn Leu Ala Leu Asn Ser Ala Ser Ala Ile Gly
           195                 200                 205

Cys His Val Val Asn Ile Gly Ala Glu Asp Leu Arg Ala Gly Lys Pro
   210                 215                 220

His Leu Val Leu Gly Leu Leu Trp Gln Ile Ile Lys Ile Gly Leu Phe
225                 230                 235                 240

Ala Asp Ile Glu Leu Ser Arg Asn Glu Ala Leu Ala Ala Leu Leu Arg
               245                 250                 255
```

1168

```
Asp Gly Glu Thr Leu Glu Glu Leu Met Lys Leu Ser Pro Glu Glu Leu
            260                 265             270

Leu Leu Arg Trp Ala Asn Phe His Leu Glu Asn Ser Gly Trp Gln Lys
            275             280             285

Ile Asn Asn Phe Ser Ala Asp Ile Lys Leu Ile Asp Phe Ser Asn Ser
    290             295             300

Val Lys Asp Ser Lys Ala Tyr Phe His Leu Leu Asn Gln Ile Ala Pro
305             310             315             320

Lys Gly Gln Lys Glu Gly Glu Pro Arg Ile Asp Ile Asn Met Ser Gly
            325             330             335

Phe Asn Glu Thr Asp Asp Leu Lys Arg Ala Glu Ser Met Leu Gln Gln
            340             345             350

Ala Asp Lys Leu Gly Cys Arg Gln Phe Val Thr Pro Ala Asp Val Val
            355             360             365

Ser Gly Asn Pro Lys Leu Asn Leu Ala Phe Val Ala Asn Leu Phe Asn
    370             375             380

Lys Tyr Pro Ala Leu Thr Lys Pro Glu Asn Gln Asp Ile Asp Trp Thr
385             390             395             400

Leu Leu Glu Gly Glu Thr Arg Glu Glu Arg Thr Phe Arg Asn Trp Met
            405             410             415

Asn Ser Leu Gly Val Asn Pro His Val Asn His Leu Tyr Ala Asp Leu
            420             425             430

Gln Asp Ala Leu Val Ile Leu Gln Leu Tyr Glu Arg Ile Lys Val Pro
            435             440             445

Val Asp Trp Ser Lys Val Asn Lys Pro Pro Tyr Pro Lys Leu Gly Ala
    450             455             460

Asn Met Lys Lys Leu Glu Asn Cys Asn Tyr Ala Val Glu Leu Gly Lys
465             470             475             480

His Pro Ala Lys Phe Ser Leu Val Gly Ile Gly Gly Gln Asp Leu Asn
            485             490             495

Asp Gly Asn Gln Thr Leu Thr Leu Ala Leu Val Trp Gln Leu Met Arg
            500             505             510

Arg Tyr Thr Leu Asn Val Leu Glu Asp Leu Gly Asp Gly Gln Lys Ala
    515             520             525
```

```
Asn Asp Asp Ile Ile Val Asn Trp Val Asn Arg Thr Leu Ser Glu Ala
    530             535             540

Gly Lys Ser Thr Ser Ile Gln Ser Phe Lys Asp Lys Thr Ile Ser Ser
545             550             555             560

Ser Leu Ala Val Val Asp Leu Ile Asp Ala Ile Gln Pro Gly Cys Ile
            565             570             575

Asn Tyr Asp Leu Val Lys Ser Gly Asn Leu Thr Glu Asp Asp Lys His
            580             585             590

Asn Asn Ala Lys Tyr Ala Val Ser Met Ala Arg Arg Ile Gly Ala Arg
            595             600             605

Val Tyr Ala Leu Pro Glu Asp Leu Val Glu Val Lys Pro Lys Met Val
    610             615             620

Met Thr Val Phe Ala Cys Leu Met Gly Arg Gly Met Lys Arg Val
625             630             635
```

```
<210> 1159
<211> 63
<212> PRT
<213> Homo sapiens

<400> 1159
Thr Ile Trp Pro Leu Asn Phe His Arg Lys Asn Asp Pro Thr Phe Leu
  1           5               10              15

Ser Met Ser Tyr Leu Ile Ser Arg Ser Trp Asp Gly Leu Thr Ile Leu
            20              25              30

Val Tyr Ile Leu Asp Thr Glu Arg Cys Tyr Ala Ser Val Ile Ile Pro
        35              40              45

Arg Leu Glu Ile Gly Arg Ala Lys Lys Val Leu Leu Phe Phe Leu
    50              55              60
```

```
<210> 1160
<211> 207
<212> PRT
<213> Homo sapiens

<400> 1160
Glu Val Tyr Gly Gly Ser Leu Asp Lys Glu Phe Asp Glu Ser Ser Pro
```

			1		5					10				15	

```
                1                    5                           10                          15

        Lys Gln Pro Thr Asn Pro Tyr Ala Ser Ser Lys Ala Ala Ala Glu Cys
                     20              25              30

        Phe Val Gln Ser Tyr Trp Glu Gln Tyr Lys Phe Pro Val Val Ile Thr
                     35              40              45

        Arg Ser Ser Asn Val Tyr Gly Pro His Gln Tyr Pro Glu Lys Val Ile
             50              55              60

        Pro Lys Phe Ile Ser Leu Leu Gln His Asn Arg Lys Cys Cys Ile His
        65              70              75              80

        Gly Ser Gly Leu Gln Thr Arg Asn Phe Leu Tyr Ala Thr Asp Val Val
                         85              90              95

        Glu Ala Phe Leu Thr Val Leu Lys Lys Gly Lys Pro Gly Glu Ile Tyr
                    100             105             110

        Asn Ile Gly Thr Asn Phe Glu Met Ser Val Val Gln Leu Ala Lys Glu
                    115             120             125

        Leu Ile Gln Leu Ile Lys Glu Thr Asn Ser Glu Ser Glu Met Glu Asn
            130             135             140

        Trp Val Asp Tyr Val Asn Asp Arg Pro Thr Asn Asp Met Arg Tyr Pro
        145             150             155             160

        Met Lys Ser Glu Lys Ile His Gly Leu Gly Trp Arg Pro Lys Val Pro
                    165             170             175

        Trp Lys Glu Gly Ile Lys Lys Thr Ile Glu Trp Tyr Arg Glu Asn Phe
                    180             185             190

        His Asn Trp Lys Asn Val Glu Lys Ala Leu Glu Pro Phe Pro Val
                    195             200             205
```

```
<210> 1161
<211> 848
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (815)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (844)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1161
Ala Leu Gly Leu Gly Val Thr Met Ala Thr Glu Glu Phe Ile Ile Arg
 1   5   10   15

Ile Pro Pro Tyr His Tyr Ile His Val Leu Asp Gln Asn Ser Asn Val
                20   25   30

Ser Arg Val Glu Val Gly Pro Lys Thr Tyr Ile Arg Gln Asp Asn Glu
            35   40   45

Arg Val Leu Phe Ala Pro Met Arg Met Val Thr Val Pro Pro Arg His
        50   55   60

Tyr Cys Thr Val Ala Asn Pro Val Ser Arg Asp Ala Gln Gly Leu Val
65   70   75   80

Leu Phe Asp Val Thr Gly Gln Val Arg Leu Arg His Ala Asp Leu Glu
                85   90   95

Ile Arg Leu Ala Gln Asp Pro Phe Pro Leu Tyr Pro Gly Glu Val Leu
            100   105   110

Glu Lys Asp Ile Thr Pro Leu Gln Val Val Leu Pro Asn Thr Ala Leu
            115   120   125

His Leu Lys Ala Leu Leu Asp Phe Glu Asp Lys Asp Gly Asp Lys Val
        130   135   140

Val Ala Gly Asp Glu Trp Leu Phe Glu Gly Pro Gly Thr Tyr Ile Pro
145   150   155   160

Arg Lys Glu Val Glu Val Val Glu Ile Ile Gln Ala Thr Ile Ile Arg
                165   170   175

Gln Asn Gln Ala Leu Arg Leu Arg Ala Arg Lys Glu Cys Trp Asp Arg
            180   185   190

Asp Gly Lys Glu Arg Val Thr Gly Glu Glu Trp Leu Val Thr Thr Val
            195   200   205

Gly Ala Tyr Leu Pro Ala Val Phe Glu Glu Val Leu Asp Leu Val Asp
    210   215   220

Ala Val Ile Leu Thr Glu Lys Thr Ala Leu His Leu Arg Ala Arg Arg
225   230   235   240

Asn Phe Arg Asp Phe Arg Gly Val Ser Arg Arg Thr Gly Glu Glu Trp

1172

```
                    245                    250                    255

        Leu Val Thr Val Gln Asp Thr Glu Ala His Val Pro Asp Val His Glu
                    260                    265                    270

        Glu Val Leu Gly Val Val Pro Ile Thr Thr Leu Gly Pro His Asn Tyr
                    275                    280                    285

        Cys Val Ile Leu Asp Pro Val Gly Pro Asp Gly Lys Asn Gln Leu Gly
                    290                    295                    300

        Gln Lys Arg Val Val Lys Gly Glu Lys Ser Phe Phe Leu Gln Pro Gly
        305                    310                    315                    320

        Glu Gln Leu Glu Gln Gly Ile Gln Asp Val Tyr Val Leu Ser Glu Gln
                    325                    330                    335

        Gln Gly Leu Leu Leu Arg Ala Leu Gln Pro Leu Glu Glu Gly Glu Asp
                    340                    345                    350

        Glu Glu Lys Val Ser His Gln Ala Gly Asp His Trp Leu Ile Arg Gly
                    355                    360                    365

        Pro Leu Glu Tyr Val Pro Ser Ala Lys Val Glu Val Val Glu Glu Arg
                    370                    375                    380

        Gln Ala Ile Pro Leu Asp Glu Asn Glu Gly Ile Tyr Val Gln Asp Val
        385                    390                    395                    400

        Lys Thr Gly Lys Val Arg Ala Val Ile Gly Ser Thr Tyr Met Leu Thr
                    405                    410                    415

        Gln Asp Glu Val Leu Trp Glu Lys Glu Leu Pro Pro Gly Val Glu Glu
                    420                    425                    430

        Leu Leu Asn Lys Gly Gln Asp Pro Leu Ala Asp Arg Gly Glu Lys Asp
                    435                    440                    445

        Thr Ala Lys Ser Leu Gln Pro Leu Ala Pro Arg Asn Lys Thr Arg Val
                    450                    455                    460

        Val Ser Tyr Arg Val Pro His Asn Ala Ala Val Gln Val Tyr Asp Tyr
        465                    470                    475                    480

        Arg Glu Lys Arg Ala Arg Val Val Phe Gly Pro Glu Leu Val Ser Leu
                    485                    490                    495

        Gly Pro Glu Glu Gln Phe Thr Val Leu Ser Leu Ser Ala Gly Arg Pro
                    500                    505                    510

        Lys Arg Pro His Ala Arg Arg Ala Leu Cys Leu Leu Leu Gly Pro Asp
```

1173

```
           515                    520                    525
      Phe Phe Thr Asp Val Ile Thr Ile Glu Thr Ala Asp His Ala Arg Leu
          530                    535                    540

      Gln Leu Gln Leu Ala Tyr Asn Trp His Phe Glu Val Asn Asp Arg Lys
      545                    550                    555                    560

      Asp Pro Gln Glu Thr Ala Lys Leu Phe Ser Val Pro Asp Phe Val Gly
                         565                    570                    575

      Asp Ala Cys Lys Ala Ile Ala Ser Arg Val Arg Gly Ala Val Ala Ser
                         580                    585                    590

      Val Thr Phe Asp Asp Phe His Lys Asn Ser Ala Arg Ile Ile Arg Thr
                         595                    600                    605

      Ala Val Phe Gly Phe Glu Thr Ser Glu Ala Lys Gly Pro Asp Gly Met
          610                    615                    620

      Ala Leu Pro Arg Pro Arg Asp Gln Ala Val Phe Pro Gln Asn Gly Leu
      625                    630                    635                    640

      Val Val Ser Ser Val Asp Val Gln Ser Val Glu Pro Val Asp Gln Arg
                         645                    650                    655

      Thr Arg Asp Ala Leu Gln Arg Ser Val Gln Leu Ala Ile Glu Ile Thr
                         660                    665                    670

      Thr Asn Ser Gln Glu Ala Ala Ala Lys His Glu Ala Gln Arg Leu Glu
                         675                    680                    685

      Gln Glu Ala Arg Gly Arg Leu Glu Arg Gln Lys Ile Leu Asp Gln Ser
          690                    695                    700

      Glu Ala Glu Lys Ala Arg Lys Glu Leu Leu Glu Leu Glu Ala Leu Ser
      705                    710                    715                    720

      Met Ala Val Glu Ser Thr Gly Thr Ala Lys Ala Glu Ala Glu Ser Arg
                         725                    730                    735

      Ala Glu Ala Ala Arg Ile Glu Gly Glu Gly Ser Val Leu Gln Ala Lys
                         740                    745                    750

      Leu Lys Ala Gln Ala Leu Ala Ile Glu Thr Glu Ala Glu Leu Gln Arg
                         755                    760                    765

      Val Gln Lys Val Arg Glu Leu Glu Leu Val Tyr Ala Arg Ala Gln Leu
          770                    775                    780

      Glu Leu Glu Val Ser Lys Ala Gln Gln Leu Ala Glu Val Glu Val Lys
```

```
         785                    790                   795                   800

    Lys Phe Lys Gln Met Thr Glu Ala Ile Gly Pro Ser Thr Ile Xaa Asp
                805                   810                   815

    Leu Ala Val Ala Gly Pro Glu Met Gln Val Lys Leu Leu Gln Ser Leu
                820                   825                   830

    Gly Leu Lys Ser Thr Leu Ile Thr Asp Gly Phe Xaa Ser Ile Asn Phe
                835                   840                   845
```

<210> 1162
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1162
```
Phe Xaa Val Gly Ile Val Asn Phe Ser Gln Pro Pro His Ala Ala Gly
  1               5               10                  15

Glu Cys Gly Cys Ser Ser Ser Glu Met Leu Thr Xaa Lys Arg Glu Val
            20                  25                  30

Lys Gln Ser Arg Tyr Val Gln Pro Cys Leu Gln Asn Pro Ser Leu Ser
            35                  40                  45

Ser Leu Ile Arg Ser Phe Leu Val Phe Tyr
      50                  55
```

<210> 1163
<211> 565
<212> PRT
<213> Homo sapiens

<400> 1163
```
Ile Pro Gly Ser Thr His Ala Ser Ala Gly Asn Leu Asp Ser Pro Glu
 1               5                   10                  15

Gly Gly Phe Asp Ala Ile Met Gln Val Ala Val Cys Gly Ser Leu Ile
            20                  25                  30

Gly Trp Arg Asn Val Thr Arg Leu Leu Val Phe Ser Thr Asp Ala Gly
        35                  40                  45

Phe His Phe Ala Gly Asp Gly Lys Leu Gly Gly Ile Val Leu Pro Asn
    50                  55                  60

Asp Gly Gln Cys His Leu Glu Asn Asn Met Tyr Thr Met Ser His Tyr
65                  70                  75                  80

Tyr Asp Tyr Pro Ser Ile Ala His Leu Val Gln Lys Leu Ser Glu Asn
            85                  90                  95

Asn Ile Gln Thr Ile Phe Ala Val Thr Glu Glu Phe Gln Pro Val Tyr
            100                 105                 110

Lys Glu Leu Lys Asn Leu Ile Pro Lys Ser Ala Val Gly Thr Leu Ser
        115                 120                 125

Ala Asn Ser Ser Asn Val Ile Gln Leu Ile Ile Asp Ala Tyr Asn Ser
    130                 135                 140

Leu Ser Ser Glu Val Ile Leu Glu Asn Gly Lys Leu Ser Glu Gly Val
145                 150                 155                 160

Thr Ile Ser Tyr Lys Ser Tyr Cys Lys Asn Gly Val Asn Gly Thr Gly
                165                 170                 175

Glu Asn Gly Arg Lys Cys Ser Asn Ile Ser Ile Gly Asp Glu Val Gln
            180                 185                 190

Phe Glu Ile Ser Ile Thr Ser Asn Lys Cys Pro Lys Lys Asp Ser Asp
        195                 200                 205

Ser Phe Lys Ile Arg Pro Leu Gly Phe Thr Glu Glu Val Glu Val Ile
    210                 215                 220

Leu Gln Tyr Ile Cys Glu Cys Glu Cys Gln Ser Glu Gly Ile Pro Glu
225                 230                 235                 240

Ser Pro Lys Cys His Glu Gly Asn Gly Thr Phe Glu Cys Gly Ala Cys
            245                 250                 255

Arg Cys Asn Glu Gly Arg Val Gly Arg His Cys Glu Cys Ser Thr Asp
            260                 265                 270
```

1176

```
Glu Val Asn Ser Glu Asp Met Asp Ala Tyr Cys Arg Lys Glu Asn Ser
        275             280             285

Ser Glu Ile Cys Ser Asn Asn Gly Glu Cys Val Cys Gly Gln Cys Val
        290             295             300

Cys Arg Lys Arg Asp Asn Thr Asn Glu Ile Tyr Ser Gly Lys Phe Cys
305             310             315             320

Glu Cys Asp Asn Phe Asn Cys Asp Arg Ser Asn Gly Leu Ile Cys Gly
            325             330             335

Gly Asn Gly Val Cys Lys Cys Arg Val Cys Glu Cys Asn Pro Asn Tyr
        340             345             350

Thr Gly Ser Ala Cys Asp Cys Ser Leu Asp Thr Ser Thr Cys Glu Ala
        355             360             365

Ser Asn Gly Gln Ile Cys Asn Gly Arg Gly Ile Cys Glu Cys Gly Val
        370             375             380

Cys Lys Cys Thr Asp Pro Lys Phe Gln Gly Gln Thr Cys Glu Met Cys
385             390             395             400

Gln Thr Cys Leu Gly Val Cys Ala Glu His Lys Glu Cys Val Gln Cys
            405             410             415

Arg Ala Phe Asn Lys Gly Glu Lys Lys Asp Thr Cys Thr Gln Glu Cys
            420             425             430

Ser Tyr Phe Asn Ile Thr Lys Val Glu Ser Arg Asp Lys Leu Pro Gln
            435             440             445

Pro Val Gln Pro Asp Pro Val Ser His Cys Lys Glu Lys Asp Val Asp
        450             455             460

Asp Cys Trp Phe Tyr Phe Thr Tyr Ser Val Asn Gly Asn Asn Glu Val
465             470             475             480

Met Val His Val Val Glu Asn Pro Glu Cys Pro Thr Gly Pro Asp Ile
            485             490             495

Ile Pro Ile Val Ala Gly Val Val Ala Gly Ile Val Leu Ile Gly Leu
            500             505             510

Ala Leu Leu Leu Ile Trp Lys Leu Leu Met Ile Ile His Asp Arg Arg
        515             520             525

Glu Phe Ala Lys Phe Glu Lys Glu Lys Met Asn Ala Lys Trp Asp Thr
        530             535             540
```

Gly Glu Asn Pro Ile Tyr Lys Ser Ala Val Thr Thr Val Val Asn Pro
545   550   555   560

Lys Tyr Glu Gly Lys
                565

<210> 1164
<211> 138
<212> PRT
<213> Homo sapiens

<400> 1164
Gly Thr Ala Gly Gly Ala Gly Gly Gln Arg Glu Val Arg Gly Cys Ser
  1   5   10   15

Ala Gln Glu Thr Met Ser Gly Gly Ser Ser Cys Ser Gln Thr Pro Ser
            20   25   30

Arg Ala Ile Pro Ala Thr Arg Arg Val Val Leu Gly Asp Gly Val Gln
          35   40   45

Leu Pro Pro Gly Asp Tyr Ser Thr Thr Pro Gly Gly Thr Leu Phe Ser
      50   55   60

Thr Thr Pro Gly Gly Thr Arg Ile Ile Tyr Asp Arg Lys Phe Leu Met
 65   70   75   80

Glu Cys Arg Asn Ser Pro Val Thr Lys Thr Pro Pro Arg Asp Leu Pro
                85   90   95

Thr Ile Pro Gly Val Thr Ser Pro Ser Ser Asp Glu Pro Pro Met Glu
            100   105   110

Ala Ser Gln Ser His Leu Arg Asn Ser Pro Glu Asp Lys Arg Ala Gly
          115   120   125

Gly Glu Glu Ser Gln Phe Glu Met Asp Ile
      130   135

<210> 1165
<211> 407
<212> PRT
<213> Homo sapiens

<400> 1165
Ala Ala Cys Gln Pro Arg Cys Cys Cys Ser Ser Cys Cys Gly Thr Ala

1178

```
    1                  5                   10                    15

  Asp Arg Ala Ala Ala Pro Leu Ser Pro Leu Gln Ala Pro Ile Trp Ala
              20                  25                  30

  Pro Ala Thr Ser Met Asp Ala Arg Arg Val Pro Gln Lys Asp Leu Arg
              35                  40                  45

  Val Lys Lys Asn Leu Lys Lys Phe Arg Tyr Val Lys Leu Ile Ser Met
              50                  55                  60

  Glu Thr Ser Ser Ser Ser Asp Asp Ser Cys Asp Ser Phe Ala Ser Asp
  65                  70                  75                  80

  Asn Phe Ala Asn Thr Arg Leu Gln Ser Val Arg Glu Gly Cys Arg Thr
                  85                  90                  95

  Arg Ser Gln Cys Arg His Ser Gly Pro Leu Arg Val Ala Met Lys Phe
              100                 105                 110

  Pro Ala Arg Ser Thr Arg Gly Ala Thr Asn Lys Lys Ala Glu Ser Arg
              115                 120                 125

  Gln Pro Ser Glu Asn Ser Val Thr Asp Ser Asn Ser Asp Ser Glu Asp
              130                 135                 140

  Glu Ser Gly Met Asn Phe Leu Glu Lys Arg Ala Leu Asn Ile Lys Gln
  145                 150                 155                 160

  Asn Lys Ala Met Leu Ala Lys Leu Met Ser Glu Leu Glu Ser Phe Pro
                  165                 170                 175

  Gly Ser Phe Arg Gly Arg His Pro Leu Pro Gly Ser Asp Ser Gln Ser
              180                 185                 190

  Arg Arg Pro Arg Arg Arg Thr Phe Pro Gly Val Ala Ser Arg Arg Asn
              195                 200                 205

  Pro Glu Arg Arg Ala Arg Pro Leu Thr Arg Ser Arg Ser Arg Ile Leu
  210                 215                 220

  Gly Ser Leu Asp Ala Leu Pro Met Glu Glu Glu Glu Glu Glu Asp Lys
  225                 230                 235                 240

  Tyr Met Leu Val Arg Lys Arg Lys Thr Val Asp Gly Tyr Met Asn Glu
                  245                 250                 255

  Asp Asp Leu Pro Arg Ser Arg Arg Ser Arg Ser Ser Val Thr Leu Pro
              260                 265                 270

  His Ile Ile Arg Pro Val Glu Glu Ile Thr Glu Glu Glu Leu Glu Asn
```

```
             275                    280                    285
    Val Cys Ser Asn Ser Arg Glu Lys Ile Tyr Asn Arg Ser Leu Gly Ser
        290                    295                    300

    Thr Cys His Gln Cys Arg Gln Lys Thr Ile Asp Thr Lys Thr Asn Cys
    305                    310                    315                    320

    Arg Asn Pro Asp Cys Trp Gly Val Arg Gly Gln Phe Cys Gly Pro Cys
                       325                    330                    335

    Leu Arg Asn Arg Tyr Gly Glu Glu Val Arg Asp Ala Leu Leu Asp Pro
                340                    345                    350

    Asn Trp His Cys Pro Pro Cys Arg Gly Ile Cys Asn Cys Ser Phe Cys
                355                    360                    365

    Arg Gln Arg Asp Gly Arg Cys Ala Thr Gly Val Leu Val Tyr Leu Ala
        370                    375                    380

    Lys Tyr His Gly Phe Gly Asn Val His Ala Tyr Leu Lys Ser Leu Lys
    385                    390                    395                    400

    Gln Glu Phe Glu Met Gln Ala
                       405
```

<210> 1166
<211> 240
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (197)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (201)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (202)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (219)

1180

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1166
Pro Asp Gly Arg Pro Thr Gly Asp Ala Phe Val Leu Phe Ala Cys Glu
 1   5   10   15

Glu Tyr Ala Gln Asn Ala Leu Arg Lys His Lys Asp Leu Leu Gly Lys
                20   25   30

Arg Tyr Ile Glu Leu Phe Arg Ser Thr Ala Ala Glu Val Gln Gln Val
            35   40   45

Leu Asn Arg Phe Ser Ser Ala Pro Leu Ile Pro Leu Pro Thr Pro Pro
    50   55   60

Ile Ile Pro Val Leu Pro Gln Gln Phe Val Pro Pro Thr Asn Val Arg
65   70   75   80

Asp Cys Ile Arg Leu Arg Gly Leu Pro Tyr Ala Ala Thr Ile Glu Asp
            85   90   95

Ile Leu Asp Phe Leu Gly Glu Phe Ala Thr Asp Ile Arg Thr His Gly
            100   105   110

Val His Met Val Leu Asn His Gln Gly Arg Pro Ser Gly Asp Ala Phe
        115   120   125

Ile Gln Met Lys Ser Ala Asp Arg Ala Phe Met Ala Ala Gln Lys Cys
    130   135   140

His Lys Lys Asn Met Lys Asp Arg Tyr Val Glu Val Phe Gln Cys Ser
145   150   155   160

Ala Glu Glu Met Asn Phe Val Leu Met Gly Gly Thr Leu Asn Arg Asn
            165   170   175

Gly Leu Ser Pro Pro Pro Cys Leu Ser Pro Pro Ser Tyr Thr Phe Pro
            180   185   190

Ala Pro Ala Ala Xaa Ile Pro Thr Xaa Xaa Ala Ile Tyr Gln Pro Ser
        195   200   205

Val Ile Leu Asn Pro Arg Ala Leu Gln Pro Xaa Thr Ala Tyr Tyr Pro
    210   215   220

Ala Gly Thr Gln Leu Phe Met Asn Tyr Thr Ala Tyr Tyr Pro Ser Val
225   230   235   240

<210> 1167
<211> 106
<212> PRT
<213> Homo sapiens

<400> 1167
Gly Gly Tyr Ser Val Asp Ser Pro Thr Leu Thr Arg Phe Phe Thr Phe
1   5   10   15

His Phe Ile Leu Pro Phe Ile Ile Ala Ala Leu Ala Ala Leu His Leu
            20   25   30

Leu Phe Leu His Glu Thr Gly Ser Asn Asn Pro Leu Gly Ile Thr Ser
        35   40   45

His Ser Asp Lys Ile Thr Phe His Pro Tyr Tyr Thr Ile Lys Asp Ala
    50   55   60

Leu Gly Leu Leu Leu Phe Leu Leu Ser Leu Met Thr Leu Thr Leu Phe
65   70   75   80

Ser Pro Asp Leu Leu Gly Asp Pro Asp Asn Tyr Thr Leu Ala Asn Pro
            85   90   95

Leu Asn Thr Pro Pro His Ile Lys Pro Glu
            100   105

<210> 1168
<211> 210
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1168
Gln His Val Gln Arg Glu Trp Ser Gly His Gly Glu Asp Arg Gly Asp
1   5   10   15

Gly Glu Asp Ala Glu Arg Gly Ser Cys Arg Glu Glu Pro Ala His Gly
            20   25   30

Val Glu Gly Ala Gly Asp Gly Ala Ala Ala Ala Gly Pro Gly Gly Gly
            35   40   45

```
Ala Ala Glu Ala Xaa Gln Val Glu Arg Arg Leu Gln Ser Glu Ser Ala
    50              55      -           60

Arg Arg Gln Gln Leu Val Glu Lys Glu Val Lys Met Arg Glu Lys Gln
65              70          75                  80

Phe Ser Gln Ala Arg Pro Leu Thr Arg Tyr Leu Pro Ile Arg Lys Glu
            85          90              95

Asp Phe Asp Leu Lys Thr His Ile Glu Ser Ser Gly His Gly Val Asp
        100          105              110

Thr Cys Leu His Val Val Leu Ser Ser Lys Val Cys Arg Gly Tyr Leu
        115          120              125

Val Lys Met Gly Gly Lys Ile Lys Ser Trp Lys Lys Arg Trp Phe Val
    130          135          140

Phe Asp Arg Leu Lys Arg Thr Leu Ser Tyr Tyr Val Asp Lys His Glu
145              150          155              160

Thr Lys Leu Lys Gly Val Ile Tyr Phe Gln Ala Ile Glu Gly Ser Val
            165          170              175

Leu Arg Pro Pro Ala Pro Val Gln Pro Arg Arg Gly Phe Ser Ala Ser
        180              185              190

Thr Met Val Thr Glu Lys Pro Glu Pro Ser Pro His Leu Leu Arg Lys
        195              200          205

Asp Pro
    210
```

<210> 1169
<211> 181
<212> PRT
<213> Homo sapiens

<400> 1169

```
Thr Ser Lys Met Arg Ser Leu Glu Thr Leu Gly Arg Pro Lys Pro Glu
    1               5           10              15

Cys Glu Gly Tyr Asp Pro Asn Ala Leu Tyr Cys Ile Cys Arg Gln Pro
            20          25              30

His Asn Asn Arg Phe Met Ile Cys Cys Asp Arg Cys Glu Glu Trp Phe
        35          40              45

His Gly Asp Cys Val Gly Ile Ser Glu Ala Arg Gly Arg Leu Leu Glu
```

```
        50                   55                   60

Arg Asn Gly Glu Asp Tyr Ile Cys Pro Asn Cys Thr Ile Leu Gln Val
 65                  70                  75                  80

Gln Asp Glu Thr His Ser Glu Thr Ala Asp Gln Gln Glu Ala Lys Trp
                 85                  90                  95

Arg Pro Gly Asp Ala Asp Gly Thr Asp Cys Thr Ser Ile Gly Thr Ile
            100                 105                 110

Glu Gln Lys Ser Ser Glu Asp Gln Gly Ile Lys Gly Arg Ile Glu Lys
            115                 120                 125

Ala Ala Asn Pro Ser Gly Lys Lys Lys Leu Lys Ile Phe Gln Pro Val
            130                 135                 140

Ile Glu Ala Pro Gly Ala Ser Lys Cys Ile Gly Pro Gly Cys Cys His
145                 150                 155                 160

Val Ala His Pro Thr Arg Cys Thr Ala Val Met Thr Val Ser Ser Asn
                 165                 170                 175

Thr Pro Gln Arg Gln
            180
```

```
<210> 1170
<211> 166
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1170
Ala Gln Xaa Leu Ser Ser Pro Val Arg Gly Ile Ser Gly Glu Gln Ser
 1               5                  10                  15
```

```
    Thr Xaa Gly Ser Phe Pro Leu Arg Tyr Val Gln Asp Gln Val Ala Ala
            20                  25                  30

    Pro Phe Gln Leu Ser Asn His Thr Gly Arg Ile Lys Val Val Phe Thr
            35                  40                  45

    Pro Ser Ile Cys Lys Val Thr Cys Thr Lys Gly Ser Cys Gln Asn Ser
            50                  55                  60

    Cys Glu Lys Gly Asn Thr Thr Thr Leu Ile Ser Glu Asn Gly His Ala
    65                  70                  75                  80

    Ala Asp Thr Leu Thr Ala Thr Asn Phe Arg Val Val Ile Cys His Leu
                    85                  90                  95

    Pro Cys Met Asn Gly Gly Gln Cys Ser Ser Arg Asp Lys Cys Gln Cys
                100                 105                 110

    Pro Pro Asn Phe Thr Gly Lys Leu Cys Gln Ile Pro Val His Gly Ala
            115                 120                 125

    Ser Val Xaa Lys Leu Tyr Gln His Ser Gln Gln Pro Gly Lys Ala Leu
        130                 135                 140

    Gly Thr His Val Ile His Ser Thr His Thr Leu Pro Leu Thr Val Thr
    145                 150                 155                 160

    Ser Gln Gln Glu Ser Lys
                    165
```

<210> 1171
<211> 37
<212> PRT
<213> Homo sapiens

<400> 1171

```
    Asp Leu Ser Val Asn Phe Trp Glu Pro Asn Gly Phe Gly His Asp Phe
    1               5                   10                  15

    Pro Ala His Tyr Ile Leu Thr Gln Asn Phe Phe Arg Met Ala Phe Thr
            20                  25                  30

    Ser Thr Pro Glu Ile
            35
```

<210> 1172

```
<211> 169
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (167)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1172
Arg Gly Ala Met Val Ser Cys Arg Pro Gly Cys Cys Cys Pro Trp Thr
 1               5                  10                  15

Pro Ala Val Leu Arg Xaa Ser Val Arg Gly Thr Phe Tyr Ser Pro Pro
            20                  25                  30

Glu Ser Phe Ala Gly Ser Asp Asn Glu Ser Asp Glu Glu Val Ala Gly
        35                  40                  45

Lys Lys Ser Phe Ser Ala Gln Glu Arg Glu Tyr Ile Arg Gln Gly Lys
    50                  55                  60

Glu Ala Thr Ala Val Xaa Asp Gln Ile Leu Ala Gln Glu Glu Asn Trp
65                  70                  75                  80

Lys Phe Glu Lys Asn Asn Glu Tyr Gly Asp Thr Val Tyr Thr Ile Glu
```

```
                  85                    90                    95

   Val Pro Phe His Gly Lys Thr Phe Ile Leu Lys Thr Phe Leu Pro Cys
                 100               105               110

   Pro Ala Xaa Xaa Val Tyr Gln Glu Val Ile Leu Gln Pro Glu Arg Met
                 115               120               125

   Val Leu Trp Asn Lys Thr Val Thr Ala Cys Gln Ile Leu Gln Arg Val
            130               135               140

   Glu Asp Asn Thr Leu Ile Ser Tyr Asp Val Ser Ala Arg Gly Cys Gly
   145               150               155               160

   Arg Arg Xaa Leu Pro Gln Xaa Thr Ser
                     165
```

```
<210> 1173
<211> 180
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (171)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1173
Glu Tyr Gly Asp Thr Val Tyr Thr Ile Glu Val Pro Phe His Gly Lys
 1               5                  10                15

Thr Phe Ile Leu Lys Thr Phe Leu Pro Cys Pro Ala Glu Leu Val Tyr
             20               25               30

Gln Glu Val Ile Leu Gln Pro Glu Arg Met Val Leu Trp Asn Lys Thr
            35               40               45

Val Thr Ala Cys Gln Ile Leu Gln Arg Val Glu Asp Asn Thr Leu Ile
    50               55               60

Ser Tyr Asp Val Ser Ala Gly Ala Ala Gly Gly Val Val Ser Pro Arg
 65               70               75               80

Asp Phe Val Asn Val Arg Arg Ile Glu Arg Arg Arg Asp Arg Tyr Leu
             85               90               95

Ser Ser Gly Ile Ala Thr Ser His Ser Ala Lys Pro Pro Thr His Lys
             100               105               110
```

```
Tyr Val Arg Gly Glu Asn Gly Pro Gly Gly Phe Ile Val Leu Lys Ser
        115             120             125

Ala Ser Asn Pro Arg Val Cys Thr Phe Val Trp Ile Leu Asn Thr Asp
        130             135             140

Leu Lys Gly Arg Leu Pro Arg Tyr Leu Ile His Gln Ser Leu Ala Ala
145             150             155             160

Thr Met Phe Glu Phe Ala Phe His Leu Arg Xaa Arg Ile Ser Glu Leu
            165             170             175

Gly Ala Arg Ala
            180
```

<210> 1174
<211> 436
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (426)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1174
```
Arg His Gln Arg Arg Ser Val Trp Arg Ser Arg Gly Xaa Cys Cys
1           5               10              15

Arg Cys Cys Cys Thr Asn Arg Arg Ser Pro Gln Pro Cys Ala Ser Ser
            20              25              30

Leu Pro Pro Arg Thr Gly Glu Lys Gln Pro Arg Asn Phe Met Asn Lys
        35              40              45

His Gln Lys Pro Val Leu Thr Gly Gln Arg Phe Lys Thr Arg Lys Arg
    50              55              60

Asp Glu Lys Glu Lys Phe Glu Pro Thr Val Phe Arg Asp Thr Leu Val
65              70              75              80

Gln Gly Leu Asn Glu Ala Gly Asp Asp Leu Glu Ala Val Ala Lys Phe
            85              90              95
```

Leu Asp Ser Thr Gly Ser Arg Leu Asp Tyr Arg Arg Tyr Ala Asp Thr
          100   105   110

Leu Phe Asp Ile Leu Val Ala Gly Ser Met Leu Ala Pro Gly Gly Thr
          115   120   125

Arg Ile Asp Asp Gly Asp Lys Thr Lys Met Thr Asn His Cys Val Phe
    130   135   140

Ser Ala Asn Glu Asp His Glu Thr Ile Arg Asn Tyr Ala Gln Val Phe
145   150   155   160

Asn Lys Leu Ile Arg Arg Tyr Lys Tyr Leu Glu Lys Ala Phe Glu Asp
              165   170   175

Glu Met Lys Lys Leu Leu Leu Phe Leu Lys Ala Phe Ser Glu Thr Glu
          180   185   190

Gln Thr Lys Leu Ala Met Leu Ser Gly Ile Leu Leu Gly Asn Gly Thr
          195   200   205

Leu Pro Ala Thr Ile Leu Thr Ser Leu Phe Thr Asp Ser Leu Val Lys
    210   215   220

Glu Gly Ile Ala Ala Ser Phe Ala Val Lys Leu Phe Lys Ala Trp Met
225   230   235   240

Ala Glu Lys Asp Ala Asn Ser Val Thr Ser Ser Leu Arg Lys Ala Asn
              245   250   255

Leu Asp Lys Arg Leu Leu Glu Leu Phe Pro Val Asn Arg Gln Ser Val
          260   265   270

Asp His Phe Ala Lys Tyr Phe Thr Asp Ala Gly Leu Lys Glu Leu Ser
    275   280   285

Asp Phe Leu Arg Val Gln Gln Ser Leu Gly Thr Arg Lys Glu Leu Gln
    290   295   300

Lys Glu Leu Gln Glu Arg Leu Ser Gln Glu Cys Pro Ile Lys Glu Val
305   310   315   320

Val Leu Tyr Val Lys Glu Glu Met Lys Arg Asn Asp Leu Pro Glu Thr
              325   330   335

Ala Val Ile Gly Leu Leu Trp Thr Cys Ile Met Asn Ala Val Glu Trp
              340   345   350

Asn Lys Lys Glu Glu Leu Val Ala Glu Gln Ala Leu Lys His Leu Lys
          355   360   365

```
Gln Tyr Ala Pro Leu Leu Ala Val Phe Ser Ser Gln Gly Gln Ser Glu
    370             375             380
```

```
Leu Ile Leu Leu Gln Lys Val Gln Glu Tyr Cys Tyr Asp Asn Ile His
385             390             395             400
```

```
Phe Met Lys Ala Phe Gln Lys Ile Val Leu Pro Tyr Thr Ile Ser Val
            405             410             415
```

```
Leu Leu Leu Arg Ser Glu His Gln Leu Xaa Ser Cys Arg Phe Gly Thr
            420             425             430
```

```
Ser Gly Thr Ser
            435
```

```
<210> 1175
<211> 366
<212> PRT
<213> Homo sapiens
```

```
<400> 1175
Thr Glu Pro Val Gly Tyr Thr Lys Ala Glu Glu Pro Ile Ala Met Arg
  1               5               10              15
```

```
Ser Leu Gly Ala Leu Leu Leu Leu Ser Ala Cys Leu Ala Val Ser
            20              25              30
```

```
Ala Gly Pro Val Pro Thr Pro Pro Asp Asn Ile Gln Val Gln Glu Asn
            35              40              45
```

```
Phe Asn Ile Ser Arg Ile Tyr Gly Lys Trp Tyr Asn Leu Ala Ile Gly
    50              55              60
```

```
Ser Thr Cys Pro Trp Leu Lys Lys Ile Met Asp Arg Met Thr Val Ser
65              70              75              80
```

```
Thr Leu Val Leu Gly Glu Gly Ala Thr Glu Ala Glu Ile Ser Met Thr
            85              90              95
```

```
Ser Thr Arg Trp Arg Lys Gly Val Cys Glu Glu Thr Ser Gly Ala Tyr
            100             105             110
```

```
Glu Lys Thr Asp Thr Asp Gly Lys Phe Leu Tyr His Lys Ser Lys Trp
            115             120             125
```

```
Asn Ile Thr Met Glu Ser Tyr Val Val His Thr Asn Tyr Asp Glu Tyr
    130             135             140
```

```
Ala Ile Phe Leu Thr Lys Lys Phe Ser Arg His His Gly Pro Thr Ile
```

1190

```
     145                    150                    155                    160

   Thr Ala Lys Leu Tyr Gly Arg Ala Pro Gln Leu Arg Glu Thr Leu Leu
                   165                    170                    175

   Gln Asp Phe Arg Val Val Ala Gln Gly Val Gly Ile Pro Glu Asp Ser
                   180                    185                    190

   Ile Phe Thr Met Ala Asp Arg Gly Glu Cys Val Pro Gly Glu Gln Glu
                   195                    200                    205

   Pro Glu Pro Ile Leu Ile Pro Arg Val Arg Arg Ala Val Leu Pro Gln
       210                    215                    220

   Glu Glu Glu Gly Ser Gly Gly Gly Gln Leu Val Thr Glu Val Thr Lys
   225                    230                    235                    240

   Lys Glu Asp Ser Cys Gln Leu Gly Tyr Ser Ala Gly Pro Cys Met Gly
                   245                    250                    255

   Met Thr Ser Arg Tyr Phe Tyr Asn Gly Thr Ser Met Ala Cys Glu Thr
                   260                    265                    270

   Phe Gln Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Val Thr Glu
                   275                    280                    285

   Lys Glu Cys Leu Gln Thr Cys Arg Thr Val Ala Ala Cys Asn Leu Pro
                   290                    295                    300

   Ile Val Arg Gly Pro Cys Arg Ala Phe Ile Gln Leu Trp Ala Phe Asp
   305                    310                    315                    320

   Ala Val Lys Gly Lys Cys Val Leu Phe Pro Tyr Gly Gly Cys Gln Gly
                   325                    330                    335

   Asn Gly Asn Lys Phe Tyr Ser Glu Lys Glu Cys Arg Glu Tyr Cys Gly
                   340                    345                    350

   Val Pro Gly Asp Gly Asp Glu Glu Leu Leu Arg Phe Ser Asn
                   355                    360                    365
```

<210> 1176
<211> 133
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (105)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1176
```
Met Pro Arg Ser Ser His His Pro Pro Arg Arg His Tyr His His His
  1               5                  10                  15

His Tyr His Gln Pro Pro Pro Ser Pro Cys Pro Ser Pro Pro Leu Thr
             20              25              30

Ser Pro Ser Pro Leu Ser Trp Ile Leu Trp Thr Cys Trp Pro Ser Thr
             35              40              45

Ala Ala Thr Arg Pro Gly Arg Arg Lys Trp Gly Cys Arg Leu Cys Pro
     50              55              60

Arg His Ser Ser Pro Leu Leu Leu Leu His Leu Asn Leu Leu Ala Trp
 65              70              75                   80

Ala Pro Tyr Pro His Pro Ala Thr Thr Arg Gly Asp Arg Lys Gln Lys
             85              90                   95

Lys Arg Asp Gln Asn Lys Ser Ala Xaa Leu Arg Tyr Arg Gln Arg Lys
             100             105             110

Gly Ala Gly Gly Val Glu Gly Xaa Gly Lys Gly Lys Leu Xaa Gly Gly
             115             120             125

Trp Glu Gly Lys Gly
     130
```

<210> 1177
<211> 583
<212> PRT
<213> Homo sapiens

<400> 1177
```
Thr Ala Gln Arg Pro Arg Ser Pro Glu Asn Cys Arg Pro Ser Thr Met
  1               5                  10                  15
```

Trp Leu Arg Ala Phe Ile Leu Ala Thr Leu Ser Ala Ser Ala Ala Trp
        20   25   30

Ala Gly His Pro Ser Ser Pro Pro Val Val Asp Thr Val His Gly Lys
        35   40   45

Val Leu Gly Lys Phe Val Ser Leu Glu Gly Phe Ala Gln Pro Val Ala
    50   55   60

Ile Phe Leu Gly Ile Pro Phe Ala Lys Pro Pro Leu Gly Pro Leu Arg
65   70   75   80

Phe Thr Pro Pro Gln Pro Ala Glu Pro Trp Ser Phe Val Lys Asn Ala
            85   90   95

Thr Ser Tyr Pro Pro Met Cys Thr Gln Asp Pro Lys Ala Gly Gln Leu
            100   105   110

Leu Ser Glu Leu Phe Thr Asn Arg Lys Glu Asn Ile Pro Leu Lys Leu
        115   120   125

Ser Glu Asp Cys Leu Tyr Leu Asn Ile Tyr Thr Pro Ala Asp Leu Thr
    130   135   140

Lys Lys Asn Arg Leu Pro Val Met Val Trp Ile His Gly Gly Gly Leu
145   150   155   160

Met Val Gly Ala Ala Ser Thr Tyr Asp Gly Leu Ala Leu Ala Ala His
            165   170   175

Glu Asn Val Val Val Val Thr Ile Gln Tyr Arg Leu Gly Ile Trp Gly
        180   185   190

Phe Phe Ser Thr Gly Asp Glu His Ser Arg Gly Asn Trp Gly His Leu
        195   200   205

Asp Gln Val Ala Ala Leu Arg Trp Val Gln Asp Asn Ile Ala Ser Phe
    210   215   220

Gly Gly Asn Pro Gly Ser Val Thr Ile Phe Gly Glu Ser Ala Gly Gly
225   230   235   240

Glu Ser Val Ser Val Leu Val Leu Ser Pro Leu Ala Lys Asn Leu Phe
            245   250   255

His Arg Ala Ile Ser Glu Ser Gly Val Ala Leu Thr Ser Val Leu Val
            260   265   270

Lys Lys Gly Asp Val Lys Pro Leu Ala Glu Gln Ile Ala Ile Thr Ala
        275   280   285

Gly Cys Lys Thr Thr Thr Ser Ala Val Met Val His Cys Leu Arg Gln
    290   295   300

Lys Thr Glu Glu Glu Leu Leu Glu Thr Thr Leu Lys Met Lys Phe Leu
305   310   315   320

Ser Leu Asp Leu Gln Gly Asp Pro Arg Glu Ser Gln Pro Leu Leu Gly
            325   330   335

Thr Val Ile Asp Gly Met Leu Leu Leu Lys Thr Pro Glu Glu Leu Gln
            340   345   350

Ala Glu Arg Asn Phe His Thr Val Pro Tyr Met Val Gly Ile Asn Lys
        355   360   365

Gln Glu Phe Gly Trp Leu Ile Pro Met Gln Leu Met Ser Tyr Pro Leu
    370   375   380

Ser Glu Gly Gln Leu Asp Gln Lys Thr Ala Met Ser Leu Leu Trp Lys
385   390   395   400

Ser Tyr Pro Leu Val Cys Ile Ala Lys Glu Leu Ile Pro Glu Ala Thr
            405   410   415

Glu Lys Tyr Leu Gly Gly Thr Asp Asp Thr Val Lys Lys Lys Asp Leu
            420   425   430

Phe Leu Asp Leu Ile Ala Asp Val Met Phe Gly Val Pro Ser Val Ile
        435   440   445

Val Ala Arg Asn His Arg Asp Ala Gly Ala Pro Thr Tyr Met Tyr Glu
    450   455   460

Phe Gln Tyr Arg Pro Ser Phe Ser Ser Asp Met Lys Pro Lys Thr Val
465   470   475   480

Ile Gly Asp His Gly Asp Glu Leu Phe Ser Val Phe Gly Ala Pro Phe
            485   490   495

Leu Lys Glu Gly Ala Ser Glu Glu Glu Ile Arg Leu Ser Lys Met Val
            500   505   510

Met Lys Phe Trp Ala Asn Phe Ala Arg Asn Gly Asn Pro Asn Gly Glu
        515   520   525

Gly Leu Pro His Trp Pro Glu Tyr Asn Gln Lys Glu Gly Tyr Leu Gln
    530   535   540

Ile Gly Ala Asn Thr Gln Ala Ala Gln Lys Leu Lys Asp Lys Glu Val
545   550   555   560

1194

```
Ala Phe Trp Thr Asn Leu Phe Ala Lys Lys Ala Val Glu Lys Pro Pro
             565             570             575

Gln Thr Glu His Ile Glu Leu
         580
```

<210> 1178
<211> 98
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1178
```
Pro Gly Arg Xaa Gln Leu Arg Ala Lys Phe Ser Cys Pro Pro Ala Asp
  1             5                 10                15

Arg Val Asn Val Thr Val Arg Pro Gly Leu Ala Met Ala Leu Ser Gly
            20              25              30

Ser Thr Glu Pro Cys Ala Gln Leu Ser Ile Ser Ser Ile Gly Val Val
        35              40              45

Gly Thr Ala Glu Asp Asn Arg Ser His Ser Ala His Phe Phe Glu Phe
    50              55              60

Leu Thr Lys Glu Leu Ala Leu Gly Gln Asp Arg Ile Leu Ile Arg Phe
 65              70              75              80

Phe Pro Leu Glu Ser Trp Gln Ile Gly Lys Ile Gly Thr Val Met Thr
            85              90              95

Phe Leu
```

<210> 1179
<211> 127
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1179
Phe Arg Pro Ala Val Ser Xaa Gly Ser Leu Cys Leu Pro Ala Arg Thr
 1               5                  10                  15


Ala His Ser Pro Ala Ser Ser Ala Ala Cys Arg Thr Met Ala Gln Gly
            20                  25                  30


Gln Arg Lys Phe Gln Ala His Lys Pro Ala Lys Ser Lys Thr Ala Ala
            35                  40                  45


Ala Xaa Ser Glu Lys Asn Arg Gly Pro Arg Lys Gly Gly Arg Val Ile
    50                  55                  60


Ala Pro Xaa Lys Ala Arg Val Val Gln Gln Gln Lys Leu Lys Lys Asn
65                  70                  75                  80


Leu Glu Val Gly Ile Arg Lys Lys Ile Glu His Asp Val Val Met Lys
                85                  90                  95


Ala Ser Ser Ser Leu Pro Lys Lys Leu Ala Leu Leu Lys Ala Pro Ala
            100                 105                 110


Lys Lys Lys Gly Ala Ala Ala Ala Thr Ser Ser Lys Thr Pro Ser
            115                 120                 125



<210> 1180
<211> 94
<212> PRT
<213> Homo sapiens

<400> 1180
Ser Ser Tyr Arg Ser Lys Ala Tyr Thr His Thr Lys Ile Thr Val Pro
 1               5                  10                  15


Arg Glu Arg Val Cys Val Ser Val Arg Val Ser Val Cys Ala Arg Ala
            20                  25                  30


Arg Ser Trp Pro Asn Val Arg Thr Leu His Lys Gly Gly Arg Ser Ser
```

```
                35                  40                  45

  Tyr Arg Leu Phe Asn Val Arg Glu Thr Ile Phe Leu Leu Phe Gln Leu
     50                  55                  60

  Tyr Gln Ile Leu Val Pro Gln His Arg Asn Asp Ser Glu Ser Gln Thr
  65                  70                  75                  80

  Lys Cys Ile Ile Cys Ser Ile Leu Ile Leu Leu Leu His Ser
                  85                  90
```

<210> 1181
<211> 353
<212> PRT
<213> Homo sapiens

<400> 1181

```
  Gly Ser Leu Asp Leu Trp Arg Gly Ala Glu Leu Ser Pro Gly His Ser
  1                   5                   10                  15

  Thr Leu Phe Thr Leu Cys Ala Cys Ala Lys Gly Ala Met Ala Ala Ser
                  20                  25                  30

  Cys Val Leu Leu His Thr Gly Gln Lys Met Pro Leu Ile Gly Leu Gly
                  35                  40                  45

  Thr Trp Lys Ser Glu Pro Gly Gln Val Lys Ala Ala Val Lys Tyr Ala
     50                  55                  60

  Leu Ser Val Gly Tyr Arg His Ile Asp Cys Ala Ala Ile Tyr Gly Asn
  65                  70                  75                  80

  Glu Pro Glu Ile Gly Glu Ala Leu Lys Glu Asp Val Gly Pro Gly Lys
                  85                  90                  95

  Ala Val Pro Arg Glu Glu Leu Phe Val Thr Ser Lys Leu Trp Asn Thr
                  100                 105                 110

  Lys His His Pro Glu Asp Val Glu Pro Ala Leu Arg Lys Thr Leu Ala
                  115                 120                 125

  Asp Leu Gln Leu Glu Tyr Leu Asp Leu Tyr Leu Met His Trp Pro Tyr
     130                 135                 140

  Ala Phe Glu Arg Gly Asp Asn Pro Phe Pro Lys Asn Ala Asp Gly Thr
  145                 150                 155                 160

  Ile Cys Tyr Asp Ser Thr His Tyr Lys Glu Thr Trp Lys Ala Leu Glu
                  165                 170                 175
```

Ala Leu Val Ala Lys Gly Leu Val Gln Ala Leu Gly Leu Ser Asn Phe
            180   185   190

Asn Ser Arg Gln Ile Asp Asp Ile Leu Ser Val Ala Ser Val Arg Pro
            195   200   205

Ala Val Leu Gln Val Glu Cys His Pro Tyr Leu Ala Gln Asn Glu Leu
            210   215   220

Ile Ala His Cys Gln Ala Arg Gly Leu Glu Val Thr Ala Tyr Ser Pro
225   230   235   240

Leu Gly Ser Ser Asp Arg Ala Trp Arg Asp Pro Asp Glu Pro Val Leu
                245   250   255

Leu Glu Glu Pro Val Val Leu Ala Leu Ala Glu Lys Tyr Gly Arg Ser
            260   265   270

Pro Ala Gln Ile Leu Leu Arg Trp Gln Val Gln Arg Lys Val Ile Cys
            275   280   285

Ile Pro Lys Ser Ile Thr Pro Ser Arg Ile Leu Gln Asn Ile Lys Val
290   295   300

Phe Asp Phe Thr Phe Ser Pro Glu Glu Met Lys Gln Leu Asn Ala Leu
305   310   315   320

Asn Lys Asn Trp Arg Tyr Ile Val Pro Met Leu Thr Val Asp Gly Lys
                325   330   335

Arg Val Pro Arg Asp Ala Gly His Pro Leu Tyr Pro Phe Asn Asp Pro
                340   345   350

Tyr

<210> 1182
<211> 174
<212> PRT
<213> Homo sapiens

<400> 1182
Ala Arg Asp Ser Leu Gln Leu Ser Met Ala Gln Thr Ser Ser Tyr Phe
1   5   10   15

Met Leu Ile Ser Cys Leu Met Phe Leu Ser Gln Ser Gln Gly Gln Glu
            20   25   30

```
Ala Gln Thr Glu Leu Pro Gln Ala Arg Ile Ser Cys Pro Glu Gly Thr
        35                  40                  45

Asn Ala Tyr Arg Ser Tyr Cys Tyr Tyr Phe Asn Glu Asp Arg Glu Thr
    50                  55                  60

Trp Val Asp Ala Asp Leu Tyr Cys Gln Asn Met Asn Ser Gly Asn Leu
65                  70                  75                  80

Val Ser Val Leu Thr Gln Ala Glu Gly Ala Phe Val Ala Ser Leu Ile
                85                  90                  95

Lys Glu Ser Gly Thr Asp Asp Phe Asn Val Trp Ile Gly Leu His Asp
            100                 105                 110

Pro Lys Lys Asn Arg Arg Trp His Trp Ser Ser Gly Ser Leu Val Ser
        115                 120                 125

Tyr Lys Ser Trp Gly Ile Gly Ala Pro Ser Ser Val Asn Pro Gly Tyr
    130                 135                 140

Cys Val Ser Leu Thr Ser Ser Thr Gly Phe Gln Lys Trp Lys Asp Val
145                 150                 155                 160

Pro Cys Glu Asp Lys Phe Ser Phe Val Cys Lys Phe Lys Asn
            165                 170
```

<210> 1183
<211> 342
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (169)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (171)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (187)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (302)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (308)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1183
Ser Ile Phe Ser Tyr Ile Arg Leu Glu Leu Pro Ser Met Trp Leu Leu
 1   5   10   15

Val Ser Val Ile Leu Ile Ser Arg Ile Ser Ser Val Gly Gly Glu Ala
            20   25   30

Thr Phe Cys Asp Phe Pro Lys Ile Asn His Gly Ile Leu Tyr Asp Glu
            35   40   45

Glu Lys Tyr Lys Pro Phe Ser Gln Val Pro Thr Gly Glu Val Phe Tyr
        50   55   60

Tyr Ser Cys Glu Tyr Asn Phe Val Ser Pro Ser Lys Ser Phe Trp Thr
65   70   75   80

Arg Ile Thr Cys Thr Glu Glu Gly Trp Ser Pro Thr Pro Lys Cys Leu
                85   90   95

Arg Leu Cys Phe Phe Pro Phe Val Glu Asn Gly His Ser Glu Ser Ser
            100   105   110

Gly Gln Thr His Leu Glu Gly Asp Thr Val Gln Ile Ile Cys Asn Thr
        115   120   125

Gly Tyr Arg Leu Gln Asn Asn Glu Asn Asn Ile Ser Cys Val Glu Arg
    130   135   140

Gly Trp Ser Thr Pro Pro Lys Cys Arg Ser Thr Asp Thr Ser Cys Val
145   150   155   160

Asn Pro Pro Thr Val Gln Asn Ala Xaa Ile Xaa Ser Arg Gln Met Ser
                165   170   175

Lys Tyr Pro Ser Gly Glu Arg Val Arg Tyr Xaa Cys Arg Ser Pro Tyr
            180   185   190

Glu Met Phe Gly Asp Glu Glu Val Met Cys Leu Asn Gly Asn Trp Thr
        195   200   205

Glu Pro Pro Gln Cys Lys Asp Ser Thr Gly Lys Cys Gly Pro Pro Pro
    210   215   220

```
Pro Ile Asp Asn Gly Asp Ile Thr Ser Phe Pro Leu Ser Val Tyr Ala
225                 230             235                     240

Pro Ala Ser Ser Val Glu Tyr Gln Cys Gln Asn Leu Tyr Gln Leu Glu
                245             250                 255

Gly Asn Lys Arg Ile Thr Cys Arg Asn Gly Gln Trp Ser Glu Pro Pro
            260             265             270

Lys Cys Leu His Pro Cys Val Ile Ser Arg Glu Ile Met Glu Asn Tyr
        275             280             285

Asn Ile Ala Leu Arg Trp Thr Ala Lys Gln Lys Leu Tyr Xaa Arg Thr
    290             295             300

Gly Glu Ser Xaa Glu Phe Val Cys Lys Arg Gly Tyr Arg Leu Ser Ser
305             310             315                     320

Arg Ser His Thr Leu Arg Thr Thr Cys Trp Asp Gly Lys Leu Glu Tyr
            325             330                 335

Pro Thr Cys Ala Lys Arg
            340
```

```
<210> 1184
<211> 198
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1184
Pro Xaa Arg Pro Arg Gly Ala Ala Ala Ala Ala Ala Ala Gly Ala
  1             5             10                  15

Ala Met Pro Lys Gly Gly Arg Lys Gly Gly His Lys Gly Arg Ala Arg
            20              25                  30

Gln Tyr Thr Ser Pro Glu Glu Ile Asp Ala Gln Leu Gln Ala Glu Lys
        35              40                  45
```

1201

```
Gln Lys Ala Arg Glu Glu Glu Glu Gln Lys Glu Gly Gly Asp Gly Ala
    50              55                  60

Ala Gly Asp Pro Lys Lys Glu Lys Lys Ser Leu Asp Ser Asp Glu Ser
65              70              75                  80

Glu Asp Glu Glu Asp Asp Tyr Gln Gln Lys Arg Lys Gly Val Glu Gly
                85              90                  95

Leu Ile Asp Ile Glu Asn Pro Asn Arg Val Ala Gln Thr Thr Lys Lys
            100             105                 110

Val Thr Gln Leu Asp Leu Asp Gly Pro Lys Glu Leu Ser Arg Arg Glu
        115             120             125

Arg Glu Glu Ile Glu Lys Gln Lys Ala Lys Glu Arg Tyr Met Lys Met
    130             135             140

His Leu Ala Gly Lys Thr Glu Gln Ala Lys Ala Asp Leu Ala Arg Leu
145             150             155             160

Xaa Ile Ile Arg Lys Gln Arg Glu Glu Ala Ala Arg Lys Lys Glu Glu
            165             170             175

Glu Arg Lys Ala Lys Asp Asp Ala Thr Leu Ser Gly Lys Arg Met Gln
            180             185             190

Ser Leu Ser Leu Asn Lys
        195
```

```
<210> 1185
<211> 210
<212> PRT
<213> Homo sapiens

<400> 1185
Ala His Ala Ser Ala His Ala Ser Gly Met Asp Leu Ser Leu Leu Trp
  1             5               10                  15

Val Leu Leu Pro Leu Val Thr Met Ala Trp Gly Gln Tyr Gly Asp Tyr
            20              25                  30

Gly Tyr Pro Tyr Gln Gln Tyr His Asp Tyr Ser Asp Asp Gly Trp Val
        35              40                  45

Asn Leu Asn Arg Gln Gly Phe Ser Tyr Gln Cys Pro Gln Gly Gln Val
    50              55                  60

Ile Val Ala Val Arg Ser Ile Phe Ser Lys Lys Glu Gly Ser Asp Arg
```

1202

```
        65                    70                    75                    80

    Gln Trp Asn Tyr Ala Cys Met Pro Thr Pro Gln Ser Leu Gly Glu Pro
                        85                    90                    95

    Thr Glu Cys Trp Trp Glu Glu Ile Asn Arg Ala Gly Met Glu Trp Tyr
                        100                   105                   110

    Gln Thr Cys Ser Asn Asn Gly Leu Val Ala Gly Phe Gln Ser Arg Tyr
                        115                   120                   125

    Phe Glu Ser Val Leu Asp Arg Glu Trp Gln Phe Tyr Cys Cys Arg Tyr
        130                   135                   140

    Ser Lys Arg Cys Pro Tyr Ser Cys Trp Leu Thr Thr Glu Tyr Pro Gly
    145                   150                   155                   160

    His Tyr Gly Glu Glu Met Asp Met Ile Ser Tyr Asn Tyr Asp Tyr Tyr
                        165                   170                   175

    Ile Arg Gly Ala Thr Thr Thr Phe Ser Ala Val Glu Arg Asp Arg Gln
                        180                   185                   190

    Trp Lys Phe Ile Met Cys Arg Met Thr Glu Tyr Asp Cys Glu Phe Ala
                        195                   200                   205

    Asn Val
        210
```

<210> 1186
<211> 141
<212> PRT
<213> Homo sapiens

<400> 1186
```
    Arg Ala Ile Tyr Phe Leu Arg Val His Arg Leu Trp Ser Ser Ile Ser
     1               5                    10                   15

    Leu Leu Phe Phe Pro Ser Ala Lys Met Ala Leu Glu Thr Val Pro Lys
                        20                   25                   30

    Asp Leu Arg His Leu Arg Ala Cys Leu Leu Cys Ser Leu Val Lys Thr
            35                   40                   45

    Ile Asp Gln Phe Glu Tyr Asp Gly Cys Asp Asn Cys Asp Ala Tyr Leu
        50                   55                   60

    Gln Met Lys Gly Asn Arg Glu Met Val Tyr Asp Cys Thr Ser Ser Ser
    65                   70                   75                   80
```

```
Phe Asp Gly Ile Ile Ala Met Met Ser Pro Glu Asp Ser Trp Val Ser
                85              90              95

Lys Trp Gln Arg Val Ser Asn Phe Lys Pro Gly Val Tyr Ala Val Ser
            100             105             110

Val Thr Gly Arg Leu Pro Gln Gly Ile Val Arg Glu Leu Lys Ser Arg
        115             120             125

Gly Val Ala Tyr Lys Ser Arg Asp Thr Ala Ile Lys Thr
    130             135             140
```

<210> 1187
<211> 76
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1187

```
Leu Leu Gly Ser Cys Leu Gln Glu Ala Met Thr Leu Asn Ser Glu Pro
 1               5              10              15

Tyr Ser Val Leu Thr Ser Gly Ser His Val Phe Leu Cys Gln Val Ile
            20              25              30

Lys Tyr Leu Val Leu Val Phe Cys Leu Xaa Pro Lys Leu Pro Leu Trp
        35              40              45

Val His Arg Arg Leu Gly Ser Ile Val Arg Met Ala Ile Arg Glu Tyr
    50              55              60

Lys Xaa Gly Phe Ser Lys Gly Leu Gly Xaa Asp Ser
65              70              75
```

1204

<210> 1188
<211> 516
<212> PRT
<213> Homo sapiens

<400> 1188
Ile Arg Ile Ala Ala Leu Asp Asp Phe Arg Thr Ser Leu Thr Met Ser
 1   5   10   15

Ser Thr Arg Ser Gln Asn Pro His Gly Leu Lys Gln Ile Gly Leu Asp
            20   25   30

Gln Ile Trp Asp Asp Leu Arg Ala Gly Ile Gln Gln Val Tyr Thr Arg
        35   40   45

Gln Ser Met Ala Lys Ser Arg Tyr Met Glu Leu Tyr Thr His Val Tyr
    50   55   60

Asn Tyr Cys Thr Ser Val His Gln Ser Asn Gln Ala Arg Gly Ala Gly
65   70   75   80

Val Pro Pro Ser Lys Ser Lys Lys Gly Gln Thr Pro Gly Gly Ala Gln
                85   90   95

Phe Val Gly Leu Glu Leu Tyr Lys Arg Leu Lys Glu Phe Leu Lys Asn
            100   105   110

Tyr Leu Thr Asn Leu Leu Lys Asp Gly Glu Asp Leu Met Asp Glu Ser
        115   120   125

Val Leu Lys Phe Tyr Thr Gln Gln Trp Glu Asp Tyr Arg Phe Ser Ser
    130   135   140

Lys Val Leu Asn Gly Ile Cys Ala Tyr Leu Asn Arg His Trp Val Arg
145   150   155   160

Arg Glu Cys Asp Glu Gly Arg Lys Gly Ile Tyr Glu Ile Tyr Ser Leu
                165   170   175

Ala Leu Val Thr Trp Arg Asp Cys Leu Phe Arg Pro Leu Asn Lys Gln
            180   185   190

Val Thr Asn Ala Val Leu Lys Leu Ile Glu Lys Glu Arg Asn Gly Glu
        195   200   205

Thr Ile Asn Thr Arg Leu Ile Ser Gly Val Val Gln Ser Tyr Val Glu
    210   215   .   220

Leu Gly Leu Asn Glu Asp Asp Ala Phe Ala Lys Gly Pro Thr Leu Thr

1205

```
      225                    230                    235                    240

      Val Tyr Lys Glu Ser Phe Glu Ser Gln Phe Leu Ala Asp Thr Glu Arg
                      245                    250                    255

      Phe Tyr Thr Arg Glu Ser Thr Glu Phe Leu Gln Gln Asn Pro Val Thr
                      260                    265                    270

      Glu Tyr Met Lys Lys Ala Glu Ala Arg Leu Leu Glu Glu Gln Arg Arg
                      275                    280                    285

      Val Gln Val Tyr Leu His Glu Ser Thr Gln Asp Glu Leu Ala Arg Lys
          290                    295                    300

      Cys Glu Gln Val Leu Ile Glu Lys His Leu Glu Ile Phe His Thr Glu
      305                    310                    315                    320

      Phe Gln Asn Leu Leu Asp Ala Asp Lys Asn Glu Asp Leu Gly Arg Met
                      325                    330                    335

      Tyr Asn Leu Val Ser Arg Ile Gln Asp Gly Leu Gly Glu Leu Lys Lys
                      340                    345                    350

      Leu Leu Glu Thr His Ile His Asn Gln Gly Leu Ala Ala Ile Glu Lys
                      355                    360                    365

      Cys Gly Glu Ala Ala Leu Asn Asp Pro Lys Met Tyr Val Gln Thr Val
          370                    375                    380

      Leu Asp Val His Lys Lys Tyr Asn Ala Leu Val Met Ser Ala Phe Asn
      385                    390                    395                    400

      Asn Asp Ala Gly Phe Val Ala Ala Leu Asp Lys Ala Cys Gly Arg Phe
                      405                    410                    415

      Ile Asn Asn Asn Ala Val Thr Lys Met Ala Gln Ser Ser Ser Lys Ser
                      420                    425                    430

      Pro Glu Leu Leu Ala Arg Tyr Cys Asp Ser Leu Leu Lys Lys Ser Ser
                      435                    440                    445

      Lys Asn Pro Glu Glu Ala Glu Leu Glu Asp Thr Leu Asn Gln Val Met
          450                    455                    460

      Val Val Phe Lys Tyr Ile Glu Asp Lys Asp Val Phe Gln Lys Phe Tyr
      465                    470                    475                    480

      Ala Lys Met Leu Ala Lys Arg Leu Val His Gln Asn Ser Ala Ser Asp
                      485                    490                    495

      Asp Ala Glu Ala Ser Met Ile Ser Lys Leu Lys Gln Ala Cys Gly Phe
```

1206

```
                500                    505                    510

Glu Tyr Thr Ser
          515



<210> 1189
<211> 287
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (172)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (254)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (271)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (274)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (275)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (280)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1189
Met Ser Tyr Cys Asp Glu Ser Arg Leu Ser Asn Leu Leu Arg Arg Ile
 1   5   10   15

Thr Arg Glu Xaa Asp Arg Asp Xaa Arg Leu Xaa Thr Val Lys Gln Leu
                20   25   30

Lys Glu Phe Ile Gln Gln Pro Glu Asn Lys Leu Val Leu Val Lys Gln
         35   40   45

Leu Asp Ile Leu Ala Ala Xaa His Asp Val Leu Asn Glu Ser Ser Lys
     50   55   60

Leu Leu Gln Glu Leu Arg Gln Glu Gly Ala Cys Cys Leu Gly Leu Leu
 65   70   75   80

Cys Ala Ser Leu Ser Tyr Glu Ala Glu Lys Ile Phe Lys Trp Ile Phe
             85   90   95

Ser Lys Phe Ser Ser Ser Ala Lys Asp Glu Val Lys Leu Leu Tyr Leu
            100   105   110

Cys Ala Thr Tyr Lys Ala Leu Glu Thr Val Gly Glu Lys Lys Ala Phe
            115   120   125

Ser Ser Val Met Gln Leu Val Met Thr Ser Leu Gln Ser Ile Leu Glu
        130   135   140

Asn Val Asp Thr Pro Glu Leu Leu Cys Lys Cys Val Lys Cys Ile Leu
145   150   155   160

Leu Val Ala Arg Cys Tyr Pro His Ile Phe Ser Xaa Asn Phe Arg Asp
                165   170   175

Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro
            180   185   190

Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe
        195   200   205

```
Trp Val Ala Asp Leu Ala Phe Pro Thr Thr Leu Leu Gly Gln Phe Leu
    210             215             220
Glu Asp Met Glu Ala Tyr Ala Glu Asp Leu Ser His Val Ala Ser Gly
225             230             235             240
Glu Ser Val Asp Glu Asp Val Pro Pro Pro Ser Val Ser Xaa Pro Lys
            245             250             255
Leu Ala Ala Leu Leu Arg Val Phe Ser Thr Val Val Arg Ser Xaa Gly
            260             265             270
Glu Xaa Xaa Ser Pro Ile Arg Xaa Leu Gln Leu Leu Arg His Thr
        275             280             285
```

<210> 1190
<211> 100
<212> PRT
<213> Homo sapiens

<400> 1190
```
Arg Pro Pro Ser Arg Trp Ser Trp Trp Gln Gly Lys Pro Thr Gly Gly
  1             5               10              15
Val Cys Val Ala Ala Ala Arg Ser Ser Pro Ser Val Thr Ala Pro Thr
            20              25              30
Ser Ser Asn Ala Leu Ala Tyr Leu His Ser Ser Ser Arg Pro Lys Arg
        35              40              45
Pro Ala Trp Trp His Ser Val Pro Ala Arg Pro Leu Arg Gly Pro Arg
    50              55              60
Thr Ala Met Ala Pro Thr Gly Val Ser Ala Cys Arg Arg Gln Lys Trp
65              70              75              80
Ala Pro His Ser Glu Gly Ala Ala Ala Val Gln Pro Gln Val Ala Leu
            85              90              95
Ala Pro Gly Leu
        100
```

<210> 1191
<211> 115
<212> PRT
<213> Homo sapiens

<400> 1191
Asn Asp Val Ile His Gln Tyr Val Tyr Met Tyr Phe Tyr Ile Asp Leu
1   5   10   15

Glu Asn Thr Ala Lys Thr Phe Met Thr Ser Cys Ile Thr Ala Phe Val
            20   25   30

Tyr Ile Phe Leu Thr Val Ile Ile Pro Thr Gly Thr Leu Thr Val Ala
        35   40   45

Leu Leu Asn Val Gln Asn Leu Tyr Phe Arg Asn Asn Lys Lys Lys Asp
    50   55   60

Thr Tyr Met Phe Pro Lys Gln Trp Cys Gly Glu Cys Val Arg Lys Thr
65   70   75   80

Asn Leu Ile Gly Ser Thr Asn Thr Lys Cys Ile Thr Asn Ala Pro Val
            85   90   95

His Val Phe Val Leu Lys Arg Val Asn Glu Asp Leu Tyr Ile Ser Ile
            100   105   110

Asn Asp Ile
        115

<210> 1192
<211> 415
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1192
Arg Ile Pro Pro Glu Ser Leu Ala Arg Glu Xaa Arg Xaa Thr Lys Ser
1   5   10   15

Phe Ser Asn Pro Arg Arg Pro Asp Arg Gly Thr Trp Ser Leu Ser Glu
            20   25   30

Lys Phe Asn Leu Arg Asp Lys Met Gln Trp Thr Ser Leu Leu Leu Leu
        35   40   45

1210

```
Ala Gly Leu Phe Ser Leu Ser Gln Ala Gln Tyr Glu Asp Asp Pro His
    50                  55                  60

Trp Trp Phe His Tyr Leu Arg Ser Gln Gln Ser Thr Tyr Tyr Asp Pro
65          Phe     70                  75                  80

Tyr Asp Pro Tyr Pro Tyr Glu Thr Tyr Glu Pro Tyr Pro Tyr Gly Val
                85                  90                  95

Asp Glu Gly Pro Ala Tyr Thr Tyr Gly Ser Pro Ser Pro Pro Asp Pro
            100                 105                 110

Arg Asp Cys Pro Gln Glu Cys Asp Cys Pro Pro Asn Phe Pro Thr Ala
        115             120                 125

Met Tyr Cys Asp Asn Arg Asn Leu Lys Tyr Leu Pro Phe Val Pro Ser
    130             135                 140

Arg Met Lys Tyr Val Tyr Phe Gln Asn Asn Gln Ile Thr Ser Ile Gln
145             150                 155                 160

Glu Gly Val Phe Asp Asn Ala Thr Gly Leu Leu Trp Ile Ala Leu His
            165                 170                 175

Gly Asn Gln Ile Thr Ser Asp Lys Val Gly Arg Lys Val Phe Ser Lys
            180                 185                 190

Leu Arg His Leu Glu Arg Leu Tyr Leu Asp His Asn Asn Leu Thr Arg
        195                 200                 205

Met Pro Gly Pro Leu Pro Arg Ser Leu Arg Glu Leu His Leu Asp His
    210                 215                 220

Asn Gln Ile Ser Arg Val Pro Asn Asn Ala Leu Glu Gly Leu Glu Asn
225                 230                 235                 240

Leu Thr Ala Leu Tyr Leu Gln His Asn Glu Ile Gln Glu Val Gly Ser
            245                 250                 255

Ser Met Arg Gly Leu Arg Ser Leu Ile Leu Leu Asp Leu Ser Tyr Asn
            260                 265                 270

His Leu Arg Lys Val Pro Asp Gly Leu Pro Ser Ala Leu Glu Gln Leu
        275                 280                 285

Tyr Met Glu His Asn Asn Val Tyr Thr Val Pro Asp Ser Tyr Phe Arg
    290                 295                 300

Gly Ala Pro Lys Leu Leu Tyr Val Arg Leu Ser His Asn Ser Leu Thr
305                 310                 315                 320
```

```
Asn Asn Gly Leu Ala Ser Asn Thr Phe Asn Ser Ser Ser Leu Leu Glu
            325                 330                 335

Leu Asp Leu Ser Tyr Asn Gln Leu Gln Lys Ile Pro Pro Val Asn Thr
            340                 345                 350

Asn Leu Glu Asn Leu Tyr Leu Gln Gly Asn Arg Ile Asn Glu Phe Ser
            355                 360                 365

Ile Ser Ser Phe Cys Thr Val Val Asp Val Val Asn Phe Ser Lys Leu
    370                 375                 380

Gln Val Leu Arg Leu Asp Gly Asn Glu Ile Lys Arg Ser Ala Met Pro
385                 390                 395                 400

Ala Asp Ala Pro Leu Cys Leu Arg Leu Ala Ser Leu Ile Glu Ile
            405                 410                 415
```

```
<210> 1193
<211> 620
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (375)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (501)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (532)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (546)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1193
Ser Ala Val Thr Ala Phe Ser Glu Gly Ser Val Ile Ala Tyr Tyr Trp
    1                 5                 10                 15

Ser Glu Phe Ser Ile Pro Gln His Leu Val Glu Glu Ala Glu Arg Val
```

1212

```
                    20                      25                      30

        Met Ala Glu Glu Arg Val Val Met Leu Pro Pro Arg Ala Arg Ser Leu
                    35                      40                      45

        Lys Ser Phe Val Val Thr Ser Val Val Ala Phe Pro Thr Asp Ser Lys
                    50                      55                      60

        Thr Val Gln Arg Thr Gln Asp Asn Ser Cys Ser Phe Gly Leu His Ala
         65                      70                      75              80

        Arg Gly Val Glu Leu Met Arg Phe Thr Thr Pro Gly Phe Pro Asp Ser
                        85                      90                      95

        Pro Tyr Pro Ala His Ala Arg Cys Gln Trp Ala Leu Arg Gly Asp Ala
                       100                     105                     110

        Asp Ser Val Leu Ser Leu Thr Phe Arg Ser Phe Asp Leu Ala Ser Cys
                       115                     120                     125

        Asp Glu Arg Gly Ser Asp Leu Val Thr Val Tyr Asn Thr Leu Ser Pro
                   130                     135                     140

        Met Glu Pro His Ala Leu Val Gln Leu Cys Gly Thr Tyr Pro Pro Ser
        145                     150                     155                 160

        Tyr Asn Leu Thr Phe His Ser Ser Gln Asn Val Leu Leu Ile Thr Leu
                        165                     170                     175

        Ile Thr Asn Thr Glu Arg Arg His Pro Gly Phe Glu Ala Thr Phe Phe
                        180                     185                     190

        Gln Leu Pro Arg Met Ser Ser Cys Gly Gly Arg Leu Arg Lys Ala Gln
                   195                     200                     205

        Gly Thr Phe Asn Ser Pro Tyr Tyr Pro Gly His Tyr Pro Pro Asn Ile
                   210                     215                     220

        Asp Cys Thr Trp Asn Ile Glu Val Pro Asn Asn Gln His Val Lys Val
        225                     230                     235                 240

        Arg Phe Lys Phe Phe Tyr Leu Leu Glu Pro Gly Val Pro Ala Gly Thr
                        245                     250                     255

        Cys Pro Lys Asp Tyr Val Glu Ile Asn Gly Glu Lys Tyr Cys Gly Glu
                       260                     265                     270

        Arg Ser Gln Phe Val Val Thr Ser Asn Ser Asn Lys Ile Thr Val Arg
                   275                     280                     285

        Phe His Ser Asp Gln Ser Tyr Thr Asp Thr Gly Phe Leu Ala Glu Tyr
```

```
            290                    295                    300
            .

    Leu Ser Tyr Asp Ser Ser Asp Pro Cys Pro Gly Gln Phe Thr Cys Arg
    305                310            315                320

    Thr Gly Arg Cys Ile Arg Lys Glu Leu Arg Cys Asp Gly Trp Ala Asp
                325                330                335

    Cys Thr Asp His Ser Asp Glu Leu Asn Cys Ser Cys Asp Ala Gly His
                340                345                350

    Gln Phe Thr Cys Lys Asn Lys Phe Cys Lys Pro Leu Phe Trp Val Cys
            355                360                365

    Asp Ser Val Asn Asp Cys Xaa Asp Asn Ser Asp Glu Gln Gly Cys Ser
        370                375                380

    Cys Pro Ala Gln Thr Phe Arg Cys Ser Asn Gly Lys Cys Leu Ser Lys
    385                390                395                400

    Ser Gln Gln Cys Asn Gly Lys Asp Asp Cys Gly Asp Gly Ser Asp Glu
                405                410                415

    Ala Ser Cys Pro Lys Val Asn Val Val Thr Cys Thr Lys His Thr Tyr
                420                425                430

    Arg Cys Leu Asn Gly Leu Cys Leu Ser Lys Gly Asn Pro Glu Cys Asp
            435                440                445

    Gly Lys Glu Asp Cys Ser Asp Gly Ser Asp Glu Lys Asp Cys Asp Cys
        450                455                460

    Gly Leu Arg Ser Phe Thr Arg Gln Ala Arg Val Val Gly Gly Thr Asp
    465                470                475                480

    Ala Asp Glu Gly Glu Trp Pro Trp Gln Val Ser Leu His Ala Leu Gly
                485                490                495

    Gln Gly Thr Ser Xaa Gly Ala Ser Leu Ile Ser Pro Asn Trp Leu Val
                500                505                510

    Ser Ala Ala His Cys Tyr Ile Asp Asp Arg Gly Phe Arg Tyr Ser Asp
            515                520                525

    Pro Thr Gln Xaa Thr Ala Phe Leu Gly Leu His Asp Gln Ser Gln Arg
        530                535                540

    Ser Xaa Leu Gly Cys Arg Ser Ala Gly Ser Ser Ala Ser Ser Pro Thr
    545                550                555                560

    Pro Ser Ser Met Thr Ser Pro Ser Thr Met Thr Ser Arg Cys Trp Ser
```

```
                    565                  570                  575
     Trp Arg Asn Arg Gln Ser Thr Ala Pro Trp Cys Gly Pro Ser Ala Cys
             580                  585                  590

     Arg Thr Pro Pro Met Ser Ser Leu Pro Ala Arg Pro Ser Gly Ser Arg
             595                  600                  605

     Ala Gly Asp Thr Pro Ser Met Glu Ala Leu Ala Arg
         610                  615                  620
```

```
<210> 1194
<211> 51
<212> PRT
<213> Homo sapiens

<400> 1194
Arg Thr Leu Cys His Leu Thr Thr Leu Asp Glu Leu Ser Cys Gln Arg
 1               5                  10                  15

Glu Asn Leu Met Phe Lys Glu His Phe Pro Leu Ala Asp Val Thr Ala
             20                  25                  30

Gly Phe Val Phe His Met Cys Phe Ser Tyr Thr His Leu Asn Ala Phe
             35                  40                  45

Lys His Leu
     50
```

```
<210> 1195
<211> 269
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (245)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (246)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (257)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (266)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1195
Pro Ala Glu Asp Ala Ala Ser Leu Thr Trp Gly Val Ala Ile Arg Ala
 1   5   10   15

Gly Arg Ser Trp Phe Ser Gly Pro Ala Ala Pro Ala Ala Ala Met Ser
            20   25   30

Phe Phe Pro Glu Leu Tyr Phe Asn Val Asp Asn Gly Tyr Leu Glu Gly
        35   40   45

Leu Val Arg Gly Leu Lys Ala Gly Val Leu Ser Gln Ala Asp Tyr Leu
    50   55   60

Asn Leu Val Gln Cys Glu Thr Leu Glu Asp Leu Lys Leu His Leu Gln
65   70   75   80

Ser Thr Asp Tyr Gly Asn Phe Leu Ala Asn Glu Ala Ser Pro Leu Thr
            85   90   95

Val Ser Val Ile Asp Asp Arg Leu Lys Glu Lys Met Val Val Glu Phe
            100   105   110

Arg His Met Arg Asn His Ala Tyr Glu Pro Leu Ala Ser Phe Leu Asp
    115   120   125

Phe Ile Thr Tyr Ser Tyr Met Ile Asp Asn Val Ile Leu Leu Ile Thr
    130   135   140

Gly Thr Leu His Gln Arg Ser Ile Ala Glu Leu Val Pro Lys Cys His
145   150   155   160

Pro Leu Gly Ser Phe Glu Gln Met Glu Ala Val Asn Ile Ala Gln Thr
            165   170   175

Pro Ala Glu Leu Tyr Asn Ala Ile Leu Val Asp Thr Pro Leu Ala Ala
            180   185   190

Phe Phe Gln Asp Cys Ile Ser Glu Gln Asp Leu Asp Glu Met Asn Ile
    195   200   205

Glu Ile Ile Arg Asn Thr Leu Tyr Lys Ala Tyr Leu Glu Ser Phe Tyr
    210   215   220

Lys Phe Cys Thr Leu Leu Gly Gly Thr Thr Ala Asp Ala Met Cys Pro

```
          225                    230                    235                    240

    Ile Leu Glu Phe Xaa Xaa Gln Thr Val Pro Ser Ser Phe His Thr Val
                    245                    250                    255

    Xaa Gly Ser Thr Leu Arg Ala Trp Arg Xaa Gly Ser Gly
                260                    265
```

<210> 1196
<211> 301
<212> PRT
<213> Homo sapiens

<400> 1196

```
    Arg His Glu Pro Ala Pro Arg Glu Ala Pro Gly Ser Arg Ala Ser Ala
     1               5                  10                  15

    Phe Leu Leu Pro Ser Phe Leu Pro Gly Pro Arg Leu Val Pro Ala Gly
                20                  25                  30

    His Pro Thr Ala Thr Met Phe Val Pro Cys Gly Glu Ser Ala Pro Asp
                35                  40                  45

    Leu Ala Gly Phe Thr Leu Leu Met Pro Ala Val Ser Val Gly Asn Val
         50                  55                  60

    Gly Gln Leu Ala Met Asp Leu Ile Ile Ser Thr Leu Asn Met Ser Lys
     65                  70                  75                  80

    Ile Gly Tyr Phe Tyr Thr Asp Cys Leu Val Pro Met Val Gly Asn Asn
                    85                  90                  95

    Pro Tyr Ala Thr Thr Glu Gly Asn Ser Thr Glu Leu Ser Ile Asn Ala
                100                 105                 110

    Glu Val Tyr Ser Leu Pro Ser Arg Lys Leu Val Ala Leu Gln Leu Arg
                115                 120                 125

    Ser Ile Phe Ile Lys Tyr Lys Ser Lys Pro Phe Cys Glu Lys Leu Leu
         130                 135                 140

    Ser Trp Val Lys Ser Ser Gly Cys Ala Arg Val Ile Val Leu Ser Ser
    145                 150                 155                 160

    Ser His Ser Tyr Gln Arg Asn Asp Leu Gln Leu Arg Ser Thr Pro Phe
                165                 170                 175

    Arg Tyr Leu Leu Thr Pro Ser Met Gln Lys Ser Val Gln Asn Lys Ile
                180                 185                 190
```

Lys Ser Leu Asn Trp Glu Glu Met Glu Lys Ser Arg Cys Ile Pro Glu
          195   200   205

Ile Asp Asp Ser Glu Phe Cys Ile Arg Ile Pro Gly Gly Gly Ile Thr
     210   215   220

Lys Thr Leu Tyr Asp Glu Ser Cys Ser Lys Glu Ile Gln Met Ala Val
225   230   235   240

Leu Leu Lys Phe Val Ser Glu Gly Asp Asn Ile Pro Asp Ala Leu Gly
               245   250   255

Leu Val Glu Tyr Leu Asn Glu Trp Leu Gln Ile Leu Lys Pro Leu Ser
          260   265   270

Asp Asp Pro Thr Val Ser Ala Ser Arg Trp Lys Ile Pro Ser Ser Trp
          275   280   285

Arg Leu Leu Phe Gly Ser Gly Leu Pro Pro Ala Leu Phe
     290   295   300

<210> 1197
<211> 246
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (230)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1197
Gly Thr Arg Asp Leu Leu Leu Ala Ala Ala Ala Thr Gly Lys Leu
  1   5   10   15

Lys Ser Phe Ala Arg Lys Phe Ile Asn Leu Asn Glu Phe Thr Thr Tyr
          20   25   30

```
Gly Ser Glu Glu Ser Thr Lys Pro Ala Ser Val Arg Ala Leu Leu Phe
        35              40              45

Xaa Ile Ser Phe Leu Met Leu Cys His Val Ala Gln Thr Tyr Gly Ser
    50              55              60

Xaa Val Ile Leu Ser Glu Ser Arg Thr. Gly Ala Glu Val Pro Phe Phe
65              70              75              80

Glu Thr Trp Met Gln Thr Cys Met Pro Glu Glu Gly Lys Ile Leu Asn
            85              90              95

Pro Asp His Pro Cys Phe Arg Pro Asp Ser Thr Lys Val Glu Ser Leu
            100             105             110

Val Ala Leu Leu Asn Asn Ser Ser Glu Met Lys Leu Val Gln Met Lys
        115             120             125

Trp His Glu Ala Cys Leu Ser Ile Ser Ala Ala Ile Leu Glu Ile Leu
    130             135             140

Asn Ala Trp Glu Asn Gly Val Leu Ala Phe Glu Ser Ile Gln Lys Ile
145             150             155             160

Thr Asp Asn Ile Lys Gly Lys Val Cys Ser Leu Ala Val Cys Ala Val
            165             170             175

Ala Trp Leu Val Ala His Val Arg Met Leu Gly Leu Asp Glu Arg Glu
        180             185             190

Lys Ser Leu Gln Met Ile Arg Gln Leu Ala Gly Pro Leu Phe Ser Glu
    195             200             205

Asn Thr Leu Gln Phe Tyr Asn Glu Arg Val Val Ile Met Asn Ser Ile
    210             215             220

Leu Gly Ala His Val Xaa Arg Arg Ala Ala Ala Asp Ser His Ala Gly
225             230             235             240

Phe Lys Phe Pro Ser Asn
            245
```

<210> 1198
<211> 465
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

```
<222> (203)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (460)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (461)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1198
Lys Asn Met Glu Thr Glu Gln Pro Glu Glu Thr Phe Pro Asn Thr Glu
 1               5                  10                  15

Thr Asn Gly Glu Phe Gly Lys Arg Pro Ala Glu Asp Met Glu Glu Glu
                20                  25                  30

Gln Ala Phe Lys Arg Ser Arg Asn Thr Asp Glu Met Val Glu Leu Arg
                35                  40                  45

Ile Leu Leu Gln Ser Lys Asn Ala Gly Ala Val Ile Gly Lys Gly Gly
        50                  55                  60

Lys Asn Ile Lys Ala Leu Arg Thr Asp Tyr Asn Ala Ser Val Ser Val
 65                  70                  75                  80

Pro Asp Ser Ser Gly Pro Glu Arg Ile Leu Ser Ile Ser Ala Asp Ile
                85                  90                  95

Glu Thr Ile Gly Glu Ile Leu Lys Lys Ile Ile Pro Thr Leu Glu Glu
                100             105                 110

Gly Leu Gln Leu Pro Ser Pro Thr Ala Thr Ser Gln Leu Pro Leu Glu
        115                 120                 125

Ser Asp Ala Val Glu Cys Leu Asn Tyr Gln His Tyr Lys Gly Ser Asp
    130                 135                 140

Phe Asp Cys Glu Leu Arg Leu Leu Ile His Gln Ser Leu Ala Gly Gly
145                 150                 155                 160

Ile Ile Gly Val Lys Gly Ala Lys Ile Lys Glu Leu Arg Glu Asn Thr
                165                 170                 175

Gln Thr Thr Ile Lys Leu Phe Gln Glu Cys Cys Pro His Ser Thr Asp
            180                 185                 190

Arg Val Val Leu Ile Gly Gly Lys Pro Asp Xaa Val Val Glu Cys Ile
```

1220

```
          195                200                205
Lys Ile Ile Leu Asp Leu Ile Ser Glu Ser Pro Ile Lys Gly Arg Ala
    210                215                220

Gln Pro Tyr Asp Pro Asn Phe Tyr Asp Glu Thr Tyr Asp Tyr Gly Gly
225                230                235                240

Phe Thr Met Met Phe Asp Asp Arg Arg Gly Arg Pro Val Gly Phe Pro
            245                250                255

·Met Arg Gly Arg Gly Gly Phe Asp Arg Met Pro Pro Gly Arg Gly Gly
            260                265                270

Arg Pro Met Pro Pro Ser Arg Arg Asp Tyr Asp Asp Met Ser Pro Arg
        275                280                285

Arg Gly Pro Pro Pro Pro Pro Gly Arg Gly Gly Arg Gly Gly Ser
    290                295                300

Arg Ala Arg Asn Leu Pro Leu Pro Pro Pro Pro Pro Arg Gly Gly
305                310                315                320

Asp Leu Met Ala Tyr Asp Arg Arg Gly Arg Pro Gly Asp Arg Tyr Asp
            325                330                335

Gly Met Val Gly Phe Ser Ala Asp Glu Thr Trp Asp Ser Ala Ile Asp
            340                345                350

Thr Trp Ser Pro Ser Glu Trp Gln Met Ala Tyr Glu Pro Gln Gly Gly
        355                360                365

Ser Gly Tyr Asp Tyr Ser Tyr Ala Gly Gly Arg Gly Ser Tyr Gly Asp
    370                375                380

Leu Gly Gly Pro Ile Ile Thr Thr Gln Val Thr Ile Pro Lys Asp Leu
385                390                395                400

Ala Gly Ser Ile Ile Gly Lys Gly Gly Gln Arg Ile Lys Gln Ile Arg
            405                410                415

His Glu Ser Gly Ala Ser Ile Lys Ile Asp Glu Pro Leu Glu Gly Ser
            420                425                430

Glu Asp Arg Ile Ile Thr Ile Thr Gly Thr Gln Asp Gln Ile Gln Asn
        435                440                445

Ala Gln Tyr Leu Leu Gln Asn Ser Val Ser Ser Xaa Xaa Leu Ala Leu
    450                455                460

Cys
```

1221

465   .

<210> 1199
<211> 446
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1199
Tyr Pro Ala Ala Cys Xaa Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr
 1   5   10   15

Arg Pro His Glu Met Asp Gln Tyr Trp Gly Ile Gly Ser Leu Ala Ser
            20   25   30

Gly Ile Asn Leu Phe Thr Asn Ser Phe Glu Gly Pro Val Leu Asp His
            35   40   45

Arg Tyr Tyr Ala Gly Gly Cys Ser Pro His Tyr Ile Leu Asn Thr Arg
    50   55   60

Phe Arg Lys Pro Tyr Asn Val Glu Ser Tyr Thr Pro Gln Thr Gln Gly
65   70   75   80

Lys Tyr Glu Phe Ile Leu Xaa Xaa Tyr Glu Ser Tyr Ser Asp Phe Glu
                85   90   95

Arg Asn Val Thr Glu Lys Met Ala Ser Lys Ser Gly Phe Ser Phe Gly
            100   105   110

Phe Lys Ile Pro Gly Ile Phe Glu Leu Gly Ile Ser Ser Gln Ser Asp
            115   120   125

Arg Gly Lys His Tyr Ile Arg Arg Thr Lys Arg Phe Ser His Thr Lys
    130   135   140

```
Ser Val Phe Leu His Ala Arg Ser Asp Leu Glu Val Ala His Tyr Lys
145               150               155               160

Leu Lys Pro Arg Ser Leu Met Leu His Tyr Glu Phe Leu Gln Arg Val
              165               170               175

Lys Arg Leu Pro Leu Glu Tyr Ser Tyr Gly Glu Tyr Arg Asp Leu Phe
              180               185               190

Arg Asp Phe Gly Thr His Tyr Ile Thr Glu Ala Val Leu Gly Gly Ile
          195               200               205

Tyr Glu Tyr Thr Leu Val Met Asn Lys Glu Ala Met Glu Arg Gly Asp
      210               215               220

Tyr Thr Leu Asn Asn Val His Ala Cys Ala Lys Asn Asp Phe Lys Ile
225               230               235               240

Gly Gly Ala Ile Glu Glu Val Tyr Val Ser Leu Gly Val Ser Val Gly
              245               250               255

Lys Cys Arg Gly Ile Leu Asn Glu Ile Lys Asp Arg Asn Lys Arg Asp
          260               265               270

Thr Met Val Glu Asp Leu Val Val Leu Val Arg Gly Gly Ala Ser Glu
          275               280               285

His Ile Thr Thr Leu Ala Tyr Gln Glu Leu Pro Thr Ala Asp Leu Met
    290               295               300

Gln Glu Trp Gly Asp Ala Val Gln Tyr Asn Pro Ala Ile Ile Lys Val
305               310               315               320

Lys Val Glu Pro Leu Tyr Glu Leu Val Thr Ala Thr Asp Phe Ala Tyr
              325               330               335

Ser Ser Thr Val Arg Gln Asn Met Lys Gln Ala Leu Glu Glu Phe Gln
              340               345               350

Lys Glu Val Ser Ser Cys His Cys Ala Pro Cys Gln Gly Asn Gly Val
          355               360               365

Pro Val Leu Lys Gly Ser Arg Cys Asp Cys Ile Cys Pro Val Gly Ser
    370               375               380

Gln Gly Leu Ala Cys Glu Val Ser Tyr Arg Lys Asn Thr Pro Ile Asp
385               390               395               400

Gly Lys Trp Asn Cys Trp Ser Asn Trp Ser Ser Cys Ser Gly Arg Arg
              405               410               415
```

```
Lys Thr Arg Gln Arg Gln Cys Asn Asn Pro Pro Pro Gln Asn Gly Gly
          420             425             430

Ser Pro Cys Ser Gly Pro Ala Ser Glu Thr Leu Asp Cys Ser
          435             440             445
```

<210> 1200
<211> 437
<212> PRT
<213> Homo sapiens

<400> 1200

```
Leu Gly Ser Ser Asp Ser Tyr Ala Ser Pro Gly Arg Ala Ala Ala Pro
 1               5               10              15

Pro Ala Ala Ala Gly Pro Gly Asp Thr Ser Ala Cys Tyr Lys Ser Ser
          20              25              30

Gly Pro Arg Cys Leu Leu Pro Asp Leu Ala Pro Ser Ser Glu Pro Gly
          35              40              45

Ala Cys Leu Gly Gly Leu Ser Val Phe Thr Met Glu Gln Leu Ser Ser
    50              55              60

Ala Asn Thr Arg Phe Ala Leu Asp Leu Phe Leu Ala Leu Ser Glu Asn
65              70              75              80

Asn Pro Ala Gly Asn Ile Phe Ile Ser Pro Phe Ser Ile Ser Ser Ala
              85              90              95

Met Ala Met Val Phe Leu Gly Thr Arg Gly Asn Thr Ala Ala Gln Leu
          100             105             110

Ser Lys Thr Phe His Phe Asn Thr Val Glu Glu Val His Ser Arg Phe
          115             120             125

Gln Ser Leu Asn Ala Asp Ile Asn Lys Arg Gly Ala Ser Tyr Ile Leu
    130             135             140

Lys Leu Ala Asn Arg Leu Tyr Gly Glu Lys Thr Tyr Asn Phe Leu Pro
145             150             155             160

Glu Phe Leu Val Ser Thr Gln Lys Thr Tyr Gly Ala Asp Leu Ala Ser
              165             170             175

Val Asp Phe Gln His Ala Ser Glu Asp Ala Arg Lys Thr Ile Asn Gln
          180             185             190
```

1224

```
Trp Val Lys Gly Gln Thr Glu Gly Lys Ile Pro Glu Leu Leu Ala Ser
        195             200             205

Gly Met Val Asp Asn Met Thr Lys Leu Val Leu Val Asn Ala Ile Tyr
    210             215             220

Phe Lys Gly Asn Trp Lys Asp Lys Phe Met Lys Glu Ala Thr Thr Asn
225             230             235             240

Ala Pro Phe Arg Leu Asn Lys Lys Asp Arg Lys Thr Val Lys Met Met
            245             250             255

Tyr Gln Lys Lys Lys Phe Ala Tyr Gly Tyr Ile Glu Asp Leu Lys Cys
        260             265             270

Arg Val Leu Glu Leu Pro Tyr Gln Gly Glu Glu Leu Ser Met Val Ile
        275             280             285

Leu Leu Pro Asp Asp Ile Glu Asp Glu Ser Thr Gly Leu Lys Lys Ile
    290             295             300

Glu Glu Gln Leu Thr Leu Glu Lys Leu His Glu Trp Thr Lys Pro Glu
305             310             315             320

Asn Leu Asp Phe Ile Glu Val Asn Val Ser Leu Pro Arg Phe Lys Leu
            325             330             335

Glu Glu Ser Tyr Thr Leu Asn Ser Asp Leu Ala Arg Leu Gly Val Gln
            340             345             350

Asp Leu Phe Asn Ser Ser Lys Ala Asp Leu Ser Gly Met Ser Gly Ala
        355             360             365

Arg Asp Ile Phe Ile Ser Lys Ile Val His Lys Ser Phe Val Glu Val
    370             375             380

Asn Glu Glu Gly Thr Glu Ala Ala Ala Ala Thr Ala Gly Ile Ala Thr
385             390             395             400

Phe Cys Met Leu Met Pro Glu Glu Asn Phe Thr Ala Asp His Pro Phe
            405             410             415

Leu Phe Phe Ile Arg His Asn Ser Ser Gly Ser Ile Leu Phe Leu Gly
        420             425             430

Arg Phe Ser Ser Pro
        435
```

<210> 1201

```
<211> 82
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1201
Gln Leu Gly Pro Val Val Gly Gly Trp Tyr Lys Val Leu Asp Arg Phe
 1               5                  10                  15

Ile Pro Gly Thr Thr Lys Val Asp Ala Leu Lys Lys Met Leu Leu Asp
            20                  25                  30

Gln Gly Gly Phe Ala Pro Cys Phe Leu Gly Cys Phe Leu Pro Leu Val
            35                  40                  45

Gly Ala Leu Asn Gly Leu Ser Ala Gln Asp Asn Trp Pro Asn Tyr Ser
        50                  55                  60

Gly Ile Ile Leu Met Pro Leu Ser Pro Thr Thr Ile Tyr Gly Leu Leu
 65                 70                  75                  80

Cys Xaa


<210> 1202
<211> 126
<212> PRT
<213> Homo sapiens

<400> 1202
Ile Ser Arg Ser Ser Ala Arg Arg Gln Pro Phe Arg His Gly Arg Leu
 1               5                  10                  15

Trp Arg Ala Ala Ala Met Ala Leu Arg Tyr Pro Met Ala Val Gly Leu
            20                  25                  30

Asn Lys Gly His Lys Val Thr Lys Asn Val Ser Lys Pro Arg His Ser
            35                  40                  45

Arg Arg Arg Gly Arg Leu Thr Lys His Thr Lys Phe Val Arg Asp Met
        50                  55                  60

Ile Arg Glu Val Cys Gly Phe Ala Pro Tyr Glu Arg Arg Ala Met Glu
 65                 70                  75                  80
```

```
Leu Leu Lys Val Ser Lys Asp Lys Arg Ala Leu Lys Phe Ile Lys Lys
              85                  90                  95

Arg Val Gly Thr His Ile Arg Ala Lys Arg Lys Arg Glu Glu Leu Ser
              100                 105                 110

Asn Val Leu Ala Ala Met Arg Lys Ala Ala Ala Lys Lys Asp
         115                 120                 125
```

<210> 1203
<211> 130
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1203
```
Asp Trp Asn Pro Asp Leu Gln Ala Ser Ala Val Cys Ile Lys Arg Val
 1               5                  10                  15

Gly Glu Ser Gly Pro Leu Ala Gln Glu Pro Xaa Leu Leu Lys Glu Gly
              20                  25                  30

Phe Lys Ala Lys Trp Val Cys Gln Arg Cys Cys Leu Pro Phe Leu Glu
         35                  40                  45

Met Leu Ile Ser Leu Ser Lys Thr Glu Lys Ser Arg Cys Tyr Arg Asn
    50                  55                  60

Asn Leu Val Cys Cys Ile Asn Cys Ser Trp Ala Trp Ser Ser Ile Pro
65                  70                  75                  80

Thr Leu Arg Phe Pro Ala Ser Leu Cys Cys Pro Gly Ser His Ser Cys
              85                  90                  95

Arg Arg Pro Asn Pro Leu Ala Val Phe Cys Leu Lys Ile Trp Gly Ala
              100                 105                 110

Pro Ser Leu Ser Ser Pro Gly Asn Ser Leu Ala Glu Gly Gly Asp Pro
         115                 120                 125

Pro Gln
    130
```

<210> 1204
<211> 228
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (189)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (196)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (199)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (225)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1204
Trp Ala Ala Phe Glu Pro Ala Thr Leu Ala Trp Lys Phe Pro Phe Gln
 1   5   10   15

Ser Gly Phe Cys Leu Leu Leu Pro Ser Pro Ser Pro Arg Tyr Leu Phe
            20   25   30

Thr Ser His Leu Ile Ser Leu Cys Ser Ser Val Ser Pro Thr His Ile
        35   40   45

Ile Gly Asp Ser Gly Gly Ser Leu Thr Ser Leu Leu Ser Asn Ala Arg
    50   55   60

Pro Ser Gly Leu Ala Ser Val Ala Ser His Ile Asp Val Thr Leu Glu
65   70   75   80

Leu Leu Pro Gln Arg Gly Arg Arg Asp Arg Leu Ser Pro His Leu Pro
                85   90   95

Pro Tyr Ser Pro Leu Tyr Ser Arg Phe Asp His Leu Ser Pro Ser Ala
                100   105   110

```
Ala Pro Ser His Phe Gly Gln Ser Gln Ala Pro Ile Arg Leu Pro Pro
        115                 120                 125

Pro Pro Gly Ala Pro Ser Ile Ser Leu Ser Pro Leu Pro Gln Asn Leu
        130                 135                 140

Cys Lys Gly Tyr Glu Arg Asp Pro Leu Pro Ser Arg Pro Pro Leu Arg
145                 150                 155                 160

Ala Val Arg Ser Lys Lys Gln Lys Leu Val Gly Gly Trp Leu Gly Leu
                165             170                 175

Cys Pro Val Pro Arg Trp Asp Lys Leu Ala Phe Ser Xaa Ile Pro Ser
        180                 185                 190

Trp Val Pro Xaa Ser Phe Xaa Ala Pro Gly Ala Arg Thr His Cys Ala
        195                 200                 205

Val Phe Leu Phe Ser Phe Val Gly Lys Gly Thr Lys Val Phe Ala Lys
    210                 215                 220

Xaa Pro Val Xaa
225
```

```
<210> 1205
<211> 270
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (128)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1205
Leu Pro Gly Ala Val Ala Ala Ser Ser Gly Ser Pro Pro Gly Ser Ala
    1               5                   10                  15

Leu Ala Ala Val Ala Ser Gly Gly Asp Leu Phe Pro Gly Gln Pro Val
            20                  25                  30

Ser Glu Leu Ile Ala Gln Leu Leu Arg Ala Glu Pro Tyr Pro Ala Ala
        35                  40                  45

Ala Gly Arg Phe Gly Ala Gly Gly Ala Ala Gly Ala Val Leu Gly
    50                  55                  60

Ile Asp Asn Val Cys Glu Leu Ala Ala Arg Leu Leu Phe Ser Thr Val
```

```
            65                    70                    75                    80

      Glu Trp Ala Arg His Ala Pro Phe Phe Pro Glu Leu Pro Val Ala Asp
                      85                    90                    95

      Gln Val Ala Leu Leu Arg Leu Ser Trp Ser Glu Leu Phe Val Leu Asn
                     100                   105                   110

      Ala Ala Gln Ala Ala Leu Pro Leu His Thr Ala Pro Leu Leu Ala Xaa
                     115                   120                   125

      Ala Gly Leu His Ala Ala Pro Met Ala Ala Glu Arg Ala Val Ala Phe
                 130                   135                   140

      Met Asp Gln Val Arg Ala Phe Gln Glu Gln Val Asp Lys Leu Gly Arg
      145                   150                   155                   160

      Leu Gln Val Asp Ser Ala Glu Tyr Gly Cys Leu Lys Ala Ile Ala Leu
                     165                   170                   175

      Phe Thr Pro Asp Ala Cys Gly Leu Ser Asp Pro Ala His Val Glu Ser
                     180                   185                   190

      Leu Gln Glu Lys Ala Gln Val Ala Leu Thr Glu Tyr Val Arg Ala Gln
                     195                   200                   205

      Tyr Pro Ser Gln Pro Gln Arg Phe Gly Arg Leu Leu Leu Arg Leu Pro
          210                   215                   220

      Ala Leu Arg Ala Val Pro Ala Ser Leu Ile Ser Gln Leu Phe Phe Met
      225                   230                   235                   240

      Arg Leu Val Gly Lys Thr Pro Ile Glu Thr Leu Ile Arg Asp Met Leu
                     245                   250                   255

      Leu Ser Gly Ser Thr Phe Asn Trp Pro Tyr Gly Ser Gly Gln
                     260                   265                   270
```

<210> 1206
<211> 89
<212> PRT
<213> Homo sapiens

<400> 1206

```
      Met Phe His Cys Ser Asp Lys Tyr Phe Thr Phe Phe Ser Val His Gln
      1                 5                    10                    15

      Arg Glu Arg Asp Pro Pro Thr Ala Val Thr Ser Lys Cys Ser Cys Ser
                  20                    25                    30
```

1230

```
Ile Asn Gly Val Thr Asp Thr Glu Val His Ser Trp Phe Leu Ser Arg
         35                  40                  45

Val Val Ile Leu Val Ser Trp Ser Leu Gly His Trp Gly Cys Thr Leu
     50                  55                  60

Lys Ser Pro Asn Arg Leu Ala Ile Lys Ile Asn Lys Ala Ala Ala Pro
65                  70                  75                  80

Phe Gln Phe Thr Phe His Leu Thr Gln
                 85
```

```
<210> 1207
<211> 145
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1207
Cys Val Gly Lys Ala Gly Val Glu Leu Gly Cys Ser Gly Glu Gly Val
 1               5                  10                  15

Val Lys Lys Ala Ser Ser Arg Gly His Lys Ala Arg Phe Pro Leu Arg
             20                  25                  30

Ser His Lys Val Leu Ser Pro Ala Pro Gly Ala Gly Gly Val His Gly
         35                  40                  45

Pro Gly Phe Thr Ser Thr His Pro Ala His Pro Arg Gly Glu Gly Pro
     50                  55                  60

Arg Ala Pro Gly Pro Ala Ala Asp Arg Ile Leu Cys Lys Leu Cys Ser
65                  70                  75                  80

Val His Cys Lys Thr Pro Ala Gln Leu Ala Gly His Met Gln Thr His
                 85                  90                  95

Leu Gly Gly Ala Ala Pro Leu Ser Arg Glu Thr Pro Pro Ser His Ser
                100                 105                 110

Pro Pro Ala Glu Gly Asp Pro Arg Thr His Gln Val Leu Val Arg Phe
            115                 120                 125

Val Gln Trp Arg Arg Gln Arg Gln Xaa Arg Gln Arg Gln Gln Arg Gln
```

1231

```
            130                 135                 140

Gln
145


<210> 1208
<211> 378
<212> PRT
<213> Homo sapiens

<400> 1208
Ser Ala Ser Arg Ala Thr Ala Met Ser Ser Arg Gly Gly Lys Lys Lys
 1               5                  10                  15

Ser Thr Lys Thr Ser Arg Ser Ala Lys Ala Gly Val Ile Phe Pro Val
                20                  25                  30

Gly Arg Met Leu Arg Tyr Ile Lys Lys Gly His Pro Lys Tyr Arg Ile
            35                  40                  45

Gly Val Gly Ala Pro Val Tyr Met Ala Ala Val Leu Glu Tyr Leu Thr
        50                  55                  60

Ala Glu Ile Leu Glu Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys
65                  70                  75                  80

Gly Arg Val Thr Pro Arg His Ile Leu Leu Ala Val Ala Asn Asp Glu
                85                  90                  95

Glu Leu Asn Gln Leu Leu Lys Gly Val Thr Ile Ala Ser Gly Gly Val
                100                 105                 110

Leu Pro Asn Ile His Pro Glu Leu Leu Ala Lys Lys Arg Gly Ser Lys
            115                 120                 125

Gly Lys Leu Glu Ala Ile Ile Thr Pro Pro Pro Ala Lys Lys Ala Lys
    130                 135                 140

Ser Pro Ser Gln Lys Lys Pro Val Ser Lys Lys Ala Gly Gly Lys Lys
145                 150                 155                 160

Gly Ala Arg Lys Ser Lys Lys Gln Gly Glu Val Ser Lys Ala Ala Ser
                165                 170                 175

Ala Asp Ser Thr Thr Glu Gly Thr Pro Ala Asp Gly Phe Thr Val Leu
                180                 185                 190

Ser Thr Lys Ser Leu Phe Leu Gly Gln Lys Leu Asn Leu Ile His Ser
            195                 200                 205
```

```
Glu Ile Ser Asn Leu Ala Gly Phe Glu Val Glu Ala Ile Ile Asn Pro
    210                 215             220

Thr Asn Ala Asp Ile Asp Leu Lys Asp Asp Leu Gly Asn Thr Leu Glu
225                 230             235                 240

Lys Lys Gly Gly Lys Glu Phe Val Glu Ala Val Leu Glu Leu Arg Lys
                245             250                 255

Lys Asn Gly Pro Leu Glu Val Ala Gly Ala Ala Val Ser Ala Gly His
                260             265             270

Gly Leu Pro Ala Lys Phe Val Ile His Cys Asn Ser Pro Val Trp Gly
            275             280             285

Ala Asp Lys Cys Glu Glu Leu Leu Glu Lys Thr Val Lys Asn Cys Leu
    290             295             300

Ala Leu Ala Asp Asp Lys Lys Leu Lys Ser Ile Ala Phe Pro Ser Ile
305             310             315                 320

Gly Ser Gly Arg Asn Gly Phe Pro Lys Gln Thr Ala Ala Gln Leu Ile
                325             330                 335

Leu Lys Ala Ile Ser Ser Tyr Phe Val Ser Thr Met Ser Ser Ser Ile
            340             345             350

Lys Thr Val Tyr Phe Val Leu Phe Asp Ser Glu Ser Ile Gly Ile Tyr
            355             360             365

Val Gln Glu Met Ala Lys Leu Asp Ala Asn
    370             375
```

```
<210> 1209
<211> 220
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1209
Arg Gly Gly Lys Ile Xaa Asp Thr Phe Xaa Arg Tyr Ala Arg Arg Tyr
 1               5                  10                  15


Arg Ser Gly Ile Pro Gly Ser Thr His Ala Xaa Ala Pro Gly Ala Met
            20                  25                  30


Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Gly Ala Trp Ala Ile
            35                  40                  45


Pro Gly Gly Leu Gly Asp Arg Ala Pro Leu Thr Ala Thr Ala Pro Gln
    50                  55                  60


Leu Asp Asp Glu Glu Met Tyr Ser Ala His Met Pro Ala His Leu Arg
65                  70                  75                  80


Cys Asp Ala Cys Arg Ala Val Ala Tyr Gln Met Trp Gln Asn Leu Ala
            85                  90                  95


Lys Ala Glu Thr Lys Leu His Thr Ser Asn Ser Gly Gly Arg Arg Glu
            100                 105                 110


Leu Ser Glu Leu Val Tyr Thr Asp Val Leu Asp Arg Ser Cys Ser Arg
            115                 120                 125


Asn Trp Gln Asp Tyr Gly Val Arg Glu Val Asp Gln Val Lys Arg Leu
    130                 135                 140


Thr Gly Pro Gly Leu Ser Glu Gly Pro Glu Pro Ser Ile Ser Val Met
145                 150                 155                 160


Val Thr Gly Gly Pro Trp Pro Thr Arg Leu Ser Arg Thr Cys Leu His
            165                 170                 175


Tyr Leu Gly Glu Phe Gly Glu Asp Gln Ile Tyr Glu Ala His Gln Gln
            180                 185                 190


Gly Arg Gly Ala Leu Glu Ala Leu Leu Cys Gly Gly Pro Gln Gly Ala
            195                 200                 205


Cys Ser Glu Lys Val Ser Ala Thr Arg Glu Glu Leu
    210                 215                 220
```

```
<210> 1210
```

1234

<211> 231
<212> PRT
<213> Homo sapiens

<400> 1210
Ala Leu Ser Pro Ala Met Val Val Pro Glu Asp Gln Leu Thr Arg Trp
 1   5   10   15

His Pro Arg Phe Asn Val Asp Glu Val Pro Asp Ile Glu Pro Ala Ala
                20   25   30

Leu Pro Gln Pro Pro Ala Thr Glu Lys Leu Thr Thr Ala Gln Glu Val
            35   40   45

Leu Ala Arg Ala Arg Asn Leu Ile Ser Pro Arg Met Glu Lys Ala Leu
    50   55   60

Ser Gln Leu Ala Leu Arg Ser Ala Ala Pro Ser Ser Pro Gly Ser Pro
65   70   75   80

Arg Pro Ala Leu Pro Ala Thr Pro Pro Ala Thr Pro Pro Ala Ala Ser
                85   90   95

Pro Ser Ala Leu Lys Gly Val Ser Gln Asp Leu Leu Glu Arg Ile Arg
            100   105   110

Ala Lys Glu Ala Gln Lys Gln Leu Ala Gln Met Thr Arg Cys Pro Glu
    115   120   125

Gln Glu Gln Arg Leu Gln Arg Leu Glu Arg Leu Pro Glu Leu Ala Arg
    130   135   140

Val Leu Arg Ser Val Phe Val Ser Glu Arg Lys Pro Ala Leu Ser Met
145   150   155   160

Glu Val Ala Cys Ala Arg Met Val Gly Ser Cys Cys Thr Ile Met Ser
                165   170   175

Pro Gly Glu Met Glu Lys His Leu Leu Leu Leu Ser Glu Leu Leu Pro
            180   185   190

Asp Trp Leu Ser Leu His Arg Ile Arg Thr Asp Thr Tyr Val Lys Leu
            195   200   205

Asp Lys Ala Ala Asp Leu Ala His Ile Thr Ala Arg Leu Ala His Gln
    210   215   220

Thr Arg Ala Glu Glu Gly Leu
225   230

1235

<210> 1211
<211> 346
<212> PRT
<213> Homo sapiens

<400> 1211
Asn Cys Thr Thr Ile Ser Leu Val Tyr Leu His Phe Val Phe Tyr Asn
 1   5   10   15

Ser Tyr Ser Leu Phe Pro Ser Lys Glu Asn Cys Val Tyr Glu Thr Val
            20   25   30

Val Leu Pro Leu Asp Glu Arg Ala Phe Glu Lys Thr Leu Thr Pro Ile
            35   40   45

Ile Gln Glu Tyr Phe Glu His Gly Asp Thr Asn Glu Val Ala Glu Met
    50   55   60

Leu Arg Asp Leu Asn Leu Gly Glu Met Lys Ser Gly Val Pro Val Leu
65   70   75   80

Ala Val Ser Leu Ala Leu Glu Gly Lys Ala Ser His Arg Glu Met Thr
                85   90   95

Ser Lys Leu Leu Ser Asp Leu Cys Gly Thr Val Met Ser Thr Thr Asp
            100   105   110

Val Glu Lys Ser Phe Asp Lys Leu Leu Lys Asp Leu Pro Glu Leu Ala
            115   120   125

Leu Asp Thr Pro Arg Ala Pro Gln Leu Val Gly Gln Phe Ile Ala Arg
    130   135   140

Ala Val Gly Asp Gly Ile Leu Cys Asn Thr Tyr Ile Asp Ser Tyr Lys
145   150   155   160

Gly Thr Val Asp Cys Val Gln Ala Arg Ala Ala Leu Asp Lys Ala Thr
                165   170   175

Val Leu Leu Ser Met Ser Lys Gly Gly Lys Arg Lys Asp Ser Val Trp
                180   185   190

Gly Ser Gly Gly Gly Gln Gln Ser Val Asn His Leu Val Lys Glu Ile
            195   200   205

Asp Met Leu Leu Lys Glu Tyr Leu Leu Ser Gly Asp Ile Ser Glu Ala
    210   215   220

Glu His Cys Leu Lys Glu Leu Glu Val Pro His Phe His His Glu Leu
225   230   235   240

```
Val Tyr Glu Ala Ile Ile Met Val Leu Glu Ser Thr Gly Glu Ser Thr
                245                     250                     255

Phe Lys Met Ile Leu Asp Leu Leu Lys Ser Leu Trp Lys Ser Ser Thr
                260                     265                     270

Ile Thr Val Asp Gln Met Lys Arg Gly Tyr Glu Arg Ile Tyr Asn Glu
                275                     280                     285

Ile Pro Asp Ile Asn Leu Asp Val Pro His Ser Tyr Ser Val Leu Glu
        290                     295                     300

Arg Phe Val Glu Glu Cys Phe Gln Ala Gly Ile Ile Ser Lys Gln Leu
305                     310                     315                 320

Arg Asp Leu Cys Pro Ser Arg Gly Arg Lys Arg Phe Val Ser Glu Gly
                325                     330                     335

Asp Gly Gly Arg Leu Lys Pro Glu Ser Tyr
                340                     345
```

<210> 1212
<211> 175
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1212
```
Pro Arg Xaa Ile Val Ser Ala Ala Cys Gly Arg Asn His Thr Leu Ala
 1               5                   10                      15

Leu Thr Glu Thr Gly Ser Val Phe Ala Phe Gly Glu Asn Lys Met Gly
                20                  25                      30

Gln Leu Gly Leu Gly Asn Gln Thr Asp Ala Val Pro Ser Pro Ala Gln
        35                  40                      45

Ile Met Tyr Asn Gly Gln Pro Ile Thr Lys Met Ala Cys Gly Xaa Glu
    50                  55                      60
```

```
Phe Ser Met Ile Met Asp Cys Lys Gly Asn Leu Tyr Ser Phe Gly Cys
 65              70              75              80

Pro Glu Tyr Gly Gln Leu Gly His Asn Ser Asp Gly Lys Phe Ile Ala
            85              90              95

Arg Ala Gln Arg Ile Glu Tyr Asp Cys Glu Leu Val Pro Arg Arg Val
        100             105             110

Ala Ile Phe Ile Glu Lys Thr Lys Asp Gly Gln Ile Leu Pro Val Pro
        115             120             125

Asn Val Val Val Arg Asp Val Ala Cys Gly Ala Asn His Thr Leu Val
    130             135             140

Leu Asp Ser Gln Lys Arg Val Phe Ser Trp Gly Phe Gly Gly Tyr Gly
145             150             155             160

Arg Leu Gly Thr Gln Ser Arg Arg Met Arg Trp Ser Pro Ala Trp
            165             170             175
```

```
<210> 1213
<211> 127
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1213
Cys Phe Ile Cys Val Trp Cys Lys Arg Lys Leu Asp Gln Ile Asn Leu
  1           5               10              15

Gln Leu Met Ser Pro Asn Ala Asn Thr Gly Thr His Met His Thr Pro
            20              25              30

Ile Asn Thr His Thr Val His Leu Xaa Lys Gly Gln Val Ile Ser His
            35              40              45

Pro Asn Phe Thr Ser Thr Asp Pro Leu Ala Pro Thr Pro Ala Ser Thr
        50              55              60

Val Thr Ser Lys Ala Arg Ala Thr Cys Ala His Gln Thr Cys Ile Lys
 65              70              75              80

Gln Leu Ala Gly Asp Gly Cys Gly Ala Gly Gly Leu Ser Asp Gly Ser
```

```
                    85                    90                    95

    Leu Leu Leu Pro Leu Leu Arg Val Lys Leu Leu Ser Phe Leu Arg Val
                100                 105                 110

    Tyr Leu Cys Gln Val Cys Ala Phe Asn Cys Phe Tyr Phe Val Phe
                115                 120                 125
```

<210> 1214
<211> 146
<212> PRT
<213> Homo sapiens

<400> 1214

```
    Cys Thr Trp Asn Arg Cys Ser Ala Ser Pro Ala Gly Trp Gln Asn Ser
     1               5                  10                  15

    Phe Leu Gly His Leu Asn Pro Ser Ser Leu Leu Gln Asn Pro Pro Ala
                20                  25                  30

    Asn Arg Ile Gly Met Gly Ala Thr Leu Asp Ile Gln Arg Gln Gln Arg
                35                  40                  45

    Met Glu Leu Leu Asp Arg Gln Leu Met Phe Ser Gln Phe Ala Gln Gly
         50                  55                  60

    Arg Arg Gln Arg Gln Gln Gln Gly Gly Met Ile Asn Trp Asn Arg Leu
     65                  70                  75                  80

    Phe Pro Pro Leu Arg Gln Arg Gln Asn Val Asn Tyr Gln Gly Gly Arg
                    85                  90                  95

    Gln Ser Glu Pro Ala Ala Pro Pro Leu Glu Val Ser Glu Glu Gln Val
                100                 105                 110

    Ala Arg Leu Met Glu Met Gly Phe Ser Arg Gly Asp Ala Leu Glu Ala
                115                 120                 125

    Leu Arg Ala Ser Asn Asn Asp Leu Asn Val Ala Thr Asn Phe Leu Leu
        130                 135                 140

    Gln His
    145
```

<210> 1215
<211> 116
<212> PRT

```
<213> Homo sapiens

<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1215
Leu Lys Asn His Gln Lys Thr His Thr Ser Glu Lys Ser Tyr Lys Cys
 1               5                  10                  15

Asn Glu Cys Arg Lys Ala Phe Ser Tyr Cys Ser Gly Leu Ile Gln Cys
             20                  25                  30

Gln Val Ile His Thr Ile Glu Lys Pro Tyr Glu Tyr Gly Lys Cys Gly
             35                  40                  45

Lys Ala Phe Arg Gln Arg Thr Asp Leu Lys Lys His Gln Lys Met His
     50                  55                  60

Thr Glu Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser
65                  70                  75                  80

Gln Ser Thr Tyr Leu Thr Lys His Gln Lys Ile His Ser Glu Glu Lys
                 85                  90                  95

Ser Asn Ile His Thr Glu Cys Gly Glu Thr Xaa Xaa Gln Asn Ser Ser
                100                 105                 110

Phe Leu Gln Gln
        115


<210> 1216
<211> 201
<212> PRT
<213> Homo sapiens

<400> 1216
Ala Ala Gly Gly Glu Gly Phe Gly Ser Leu His Ala Ser Leu Val Gly
 1               5                  10                  15

Phe Arg Gly Val Val Ala Gly Cys Ala Arg His Phe Arg Ala Ser Arg
             20                  25                  30
```

```
Asn Gly Val Ala Asn Gly Leu Gln Ser Asn Met Pro Lys Phe Tyr Cys
        35              40              45

Asp Tyr Cys Asp Thr Tyr Leu Thr His Asp Ser Pro Ser Val Arg Lys
        50              55              60

Thr His Cys Ser Gly Arg Lys His Lys Glu Asn Val Lys Asp Tyr Tyr
65              70              75              80

Gln Lys Trp Met Glu Glu Gln Ala Gln Ser Leu Ile Asp Lys Thr Thr
            85              90              95 .

Ala Ala Phe Gln Gln Gly Lys Ile Pro Pro Thr Pro Phe Ser Ala Pro
        100             105             110

Pro Pro Ala Gly Ala Met Ile Pro Pro Pro Ser Leu Pro Gly Pro
        115             120             125

Pro Arg Pro Gly Met Met Pro Ala Pro His Met Gly Gly Pro Pro Met
        130             135             140

Met Pro Met Met Gly Pro Pro Pro Pro Gly Met Met Pro Val Gly Pro
145             150             155             160

Ala Pro Gly Met Arg Pro Pro Met Gly Gly His Met Pro Met Met Pro
            165             170             175

Gly Pro Pro Met Met Arg Pro Pro Ala Arg Pro Met Met Val Pro Thr
            180             185             190

Arg Pro Gly Met Thr Arg Pro Asp Arg
        195             200
```

```
<210> 1217
<211> 473
<212> PRT
<213> Homo sapiens

<400> 1217
Lys Phe Thr Met Lys Phe Leu Leu Ile Leu Leu Leu Gln Ala Thr Ala
 1               5               10              15

Ser Gly Ala Leu Pro Leu Asn Ser Ser Thr Ser Leu Glu Lys Asn Asn
            20              25              30

Val Leu Phe Gly Glu Arg Tyr Leu Glu Lys Phe Tyr Gly Leu Glu Ile
        35              40              45

Asn Lys Leu Pro Val Thr Lys Met Lys Tyr Ser Gly Asn Leu Met Lys
```

1241

```
        50                    55                    60

Glu Lys Ile Gln Glu Met Gln His Phe Leu Gly Leu Lys Val Thr Gly
 65                  70                  75                  80

Gln Leu Asp Thr Ser Thr Leu Glu Met Met His Ala Pro Arg Cys Gly
                85                  90                  95

Val Pro Asp Val His His Phe Arg Glu Met Pro Gly Gly Pro Val Trp
            100                 105                 110     .

Arg Lys His Tyr Ile Thr Tyr Arg Ile Asn Asn Tyr Thr Pro Asp Met
            115                 120                 125

Asn Arg Glu Asp Val Asp Tyr Ala Ile Arg Lys Ala Phe Gln Val Trp
        130                 135                 140

Ser Asn Val Thr Pro Leu Lys Phe Ser Lys Ile Asn Thr Gly Met Ala
145                 150                 155                 160

Asp Ile Leu Val Val Phe Ala Arg Gly Ala His Gly Asp Phe His Ala
                165                 170                 175

Phe Asp Gly Lys Gly Gly Ile Leu Ala His Ala Phe Gly Pro Gly Ser
            180                 185                 190

Gly Ile Gly Gly Asp Ala His Phe Asp Glu Asp Glu Phe Trp Thr Thr
            195                 200                 205

His Ser Gly Gly Thr Asn Leu Phe Leu Thr Ala Val His Glu Ile Gly
        210                 215                 220

His Ser Leu Gly Leu Gly His Ser Ser Asp Pro Lys Ala Val Met Phe
225                 230                 235                 240

Pro Thr Tyr Lys Tyr Val Asp Ile Asn Thr Phe Arg Leu Ser Ala Asp
                245                 250                 255

Asp Ile Arg Gly Ile Gln Ser Leu Tyr Gly Asp Pro Lys Glu Asn Gln
            260                 265                 270

Arg Leu Pro Asn Pro Asp Asn Ser Glu Pro Ala Leu Cys Asp Pro Asn
        275                 280                 285

Leu Ser Phe Asp Ala Val Thr Thr Val Gly Asn Lys Ile Phe Phe Phe
290                 295                 300

Lys Asp Arg Phe Phe Trp Leu Lys Val Ser Glu Arg Pro Lys Thr Ser
305                 310                 315                 320

Val Asn Leu Ile Ser Ser Leu Trp Pro Thr Leu Pro Ser Gly Ile Glu
```

1242

```
                    325                    330                     335

Ala Ala Tyr Glu Ile Glu Ala Arg Asn Gln Val Phe Leu Phe Lys Asp
            340                 345                 350

Asp Lys Tyr Trp Leu Ile Ser Asn Leu Arg Pro Glu Pro Asn Tyr Pro
            355                 360                 365

Lys Ser Ile His Ser Phe Gly Phe Pro Asn Phe Val Lys Lys Ile Asp
        370             375                 380

Ala Ala Val Phe Asn Pro Arg Phe Tyr Arg Thr Tyr Phe Phe Val Asp
385                 390                 395                 400

Asn Gln Tyr Trp Arg Tyr Asp Glu Arg Arg Gln Met Met Asp Pro Gly
                405             410                 415

Tyr Pro Lys Leu Ile Thr Lys Asn Phe Gln Gly Ile Gly Pro Lys Ile
                420                 425                 430

Asp Ala Val Phe Tyr Ser Lys Asn Lys Tyr Tyr Tyr Phe Phe Gln Gly
            435                 440                 445

Ser Asn Gln Phe Glu Tyr Asp Phe Leu Leu Gln Arg Ile Thr Lys Thr
    450                 455                 460

Leu Lys Ser Asn Ser Trp Phe Gly Cys
465                 470
```

```
<210> 1218
<211> 598
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (144)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1218
Ala Thr Ser Arg Gln Pro Ser Tyr Xaa Arg Thr Trp Cys Arg Arg Cys
 1               5                 10                  15

Cys Leu Pro Leu Ala Leu Asn Pro Val Pro Ala Ala Met Ala Pro Gly
```

                  20   25   30

        Gln Leu Ala Leu Phe Ser Val Ser Asp Lys Thr Gly Leu Val Glu Phe
                35   40   45

        Ala Arg Asn Leu Thr Ala Leu Gly Leu Asn Leu Val Ala Ser Gly Gly
                50   55   60

        Thr Ala Lys Ala Leu Arg Asp Ala Gly Leu Ala Val Arg Asp Val Ser
        65   70   75   80

        Glu Leu Thr Gly Phe Pro Glu Met Leu Gly Gly Arg Val Lys Thr Leu
                        85   90   95

        His Pro Ala Val His Ala Gly Ile Leu Ala Arg Asn Ile Pro Glu Asp
                        100   105   110

        Asn Ala Asp Met Ala Arg Leu Asp Phe Asn Leu Ile Arg Val Val Ala
                        115   120   125

        Cys Asn Leu Tyr Pro Phe Val Lys Thr Val Ala Ser Pro Gly Val Xaa
                130   135   140

        Val Glu Glu Ala Val Glu Gln Ile Asp Ile Gly Gly Val Thr Leu Leu
        145   150   155   160

        Arg Ala Ala Ala Lys Asn His Ala Arg Val Thr Val Val Cys Glu Pro
                        165   170   175

        Glu Asp Tyr Val Val Val Ser Thr Glu Met Gln Ser Ser Glu Ser Lys
                        180   185   190

        Asp Thr Ser Leu Glu Thr Arg Arg Gln Leu Ala Leu Lys Ala Phe Thr
                195   200   205

        His Thr Ala Gln Tyr Asp Glu Ala Ile Ser Asp Tyr Phe Arg Lys Gln
                210   215   220

        Tyr Ser Lys Gly Val Ser Gln Met Pro Leu Arg Tyr Gly Met Asn Pro
        225   230   235   240

        His Gln Thr Pro Ala Gln Leu Tyr Thr Leu Gln Pro Lys Leu Pro Ile
                        245   250   255

        Thr Val Leu Asn Gly Ala Pro Gly Phe Ile Asn Leu Cys Asp Ala Leu
                        260   265   270

        Asn Ala Trp Gln Leu Val Lys Glu Leu Lys Glu Ala Leu Gly Ile Pro
                275   280   285

        Ala Ala Ala Ser Phe Lys His Val Ser Pro Ala Gly Ala Ala Val Gly

1244

```
          290                 295                 300

Ile Pro Leu Ser Glu Asp Glu Ala Lys Val Cys Met Val Tyr Asp Leu
305                 310                 315                 320

Tyr Lys Thr Leu Thr Pro Ile Ser Ala Ala Tyr Ala Arg Ala Arg Gly
                325                 330                 335

Ala Asp Arg Met Ser Ser Phe Gly Asp Phe Val Ala Leu Ser Asp Val
                340                 345                 350

Cys Asp Val Pro Thr Ala Lys Ile Ile Ser Arg Glu Val Ser Asp Gly
                355                 360                 365

Ile Ile Ala Pro Gly Tyr Glu Glu Glu Ala Leu Thr Ile Leu Ser Lys
    370                 375                 380

Lys Lys Asn Gly Asn Tyr Cys Val Leu Gln Met Asp Gln Ser Tyr Lys
385                 390                 395                 400

Pro Asp Glu Asn Glu Val Arg Thr Leu Phe Gly Leu His Leu Ser Gln
                405                 410                 415

Lys Arg Asn Asn Gly Val Val Asp Lys Ser Leu Phe Ser Asn Val Val
                420                 425                 430

Thr Lys Asn Lys Asp Leu Pro Glu Ser Ala Leu Arg Asp Leu Ile Val
                435                 440                 445

Ala Thr Ile Ala Val Lys Tyr Thr Gln Ser Asn Ser Val Cys Tyr Ala
    450                 455                 460

Lys Asn Gly Gln Val Ile Gly Ile Gly Ala Gly Gln Gln Ser Arg Ile
465                 470                 475                 480

His Cys Thr Arg Leu Ala Gly Asp Lys Ala Asn Tyr Trp Trp Leu Arg
                485                 490                 495

His His Pro Gln Val Leu Ser Met Lys Phe Lys Thr Gly Val Lys Arg
                500                 505                 510

Ala Glu Ile Ser Asn Ala Ile Asp Gln Tyr Val Thr Gly Thr Ile Gly
                515                 520                 525

Glu Asp Glu Asp Leu Ile Lys Trp Lys Ala Leu Phe Glu Glu Val Pro
    530                 535                 540

Glu Leu Leu Thr Glu Ala Glu Lys Lys Glu Trp Val Glu Lys Leu Thr
545                 550                 555                 560

Glu Val Ser Ile Ser Ser Asp Ala Phe Phe Pro Phe Arg Asp Asn Val
```

1245

```
                    565                   570                   575

Asp Arg Ala Lys Arg Ser Gly Val Ala Tyr Ile Ala Ala Pro Pro Val
            580             585             590

Leu Leu Leu Thr Lys Leu
        595
```

<210> 1219
<211> 209
<212> PRT
<213> Homo sapiens

<400> 1219
```
Tyr Thr Ala Ile Met Ser Ile Met Ser Tyr Asn Gly Gly Ala Val Met
 1               5                  10                  15

Ala Met Lys Gly Lys Asn Cys Val Ala Ile Ala Ala Asp Arg Arg Phe
            20              25              30

Gly Ile Gln Ala Gln Met Val Thr Thr Asp Phe Gln Lys Ile Phe Pro
        35              40              45

Met Gly Asp Arg Leu Tyr Ile Gly Leu Ala Gly Leu Ala Thr Asp Val
    50              55              60

Gln Thr Val Ala Gln Arg Leu Lys Phe Arg Leu Asn Leu Tyr Glu Leu
65              70              75                  80

Lys Glu Gly Arg Gln Ile Lys Pro Tyr Thr Leu Met Ser Met Val Ala
            85              90              95

Asn Leu Leu Tyr Glu Lys Arg Phe Gly Pro Tyr Tyr Thr Glu Pro Val
        100             105             110

Ile Ala Gly Leu Asp Pro Lys Thr Phe Lys Pro Phe Ile Cys Ser Leu
        115             120             125

Asp Leu Ile Gly Cys Pro Met Val Thr Asp Asp Phe Val Val Ser Gly
    130             135             140

Thr Cys Ala Glu Gln Met Tyr Gly Met Cys Glu Ser Leu Trp Glu Pro
145             150             155             160

Asn Met Asp Pro Asp His Leu Phe Glu Thr Ile Ser Gln Ala Met Leu
            165             170             175

Asn Ala Val Asp Arg Asp Ala Val Ser Gly Met Gly Val Ile Val His
            180             185             190
```

```
Ile Ile Glu Lys Asp Lys Ile Thr Thr Arg Thr Leu Lys Ala Arg Met
        195                 200                 205

Asp
```

<210> 1220
<211> 140
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1220
```
Ile Ile Ser Ile Ile Ser Thr Ser Asn Lys Ile Lys Met Ser Glu Ala
  1           5                 10                 15

Pro Arg Phe Phe Val Gly Pro Glu Asp Thr Glu Ile Asn Pro Gly Asn
            20                 25                 30

Tyr Arg His Phe Phe His His Ala Asp Glu Asp Asp Glu Glu Glu Asp
        35                 40                 45

Asp Ser Xaa Pro Glu Arg Gln Ile Val Val Gly Ile Cys Ser Met Xaa
    50                 55                 60

Lys Lys Ser Lys Ser Lys Pro Met Lys Glu Ile Leu Xaa Arg Ile Ser
  65                 70                 75                 80

Leu Phe Lys Tyr Ile Thr Val Val Val Phe Glu Glu Glu Val Ile Leu
            85                 90                 95

Asn Glu Pro Val Glu Asn Trp Pro Leu Cys Asp Cys Leu Ile Ser Phe
            100                105                110
```

1247

His Ser Lys Gly Phe Pro Leu Asp Lys Ala Val Ala Tyr Ala Lys Leu
        115   120   125

Arg Asn Pro Phe Val Ile Asn Asp Leu Asn Met Gln
        130   135   140

<210> 1221
<211> 45
<212> PRT
<213> Homo sapiens

<400> 1221
Gly Leu Met Glu Ile Glu Ile Thr Cys Lys Asp Ile Thr Val Phe Met
  1   5   10   15

Ser Tyr Ile Leu Val Leu Glu Ile Val Glu Cys Met Ile Asp Asn Ile
            20   25   30

Phe Leu Ile Phe Ile Phe Ser Ser Asn Thr Ser Thr Val
        35   40   45

<210> 1222
<211> 70
<212> PRT
<213> Homo sapiens

<400> 1222
Val Ala Tyr Ile Cys Tyr Ser Lys Phe Cys Lys Tyr Ala Asn Gln Leu
  1   5   10   15

Tyr Arg Phe Ile Thr Ser Phe Leu Gly Phe Phe Trp Gly Arg Val Ile
            20   25   30

Ile Leu Leu Lys Ile Thr Met Asn Thr Leu Thr Val Arg Ile Cys Gly
        35   40   45

Lys Val Pro Leu Asn Ile Thr Lys Ile Ile Ser Leu Glu Gly Arg Asn
        50   55   60

Asn His Ser Asn Glu Leu
 65   70

<210> 1223
<211> 88
<212> PRT

<213> Homo sapiens

<400> 1223
Phe Tyr Pro Ser Thr Tyr Leu Lys Ala Pro Ser Ser Leu Val Cys Gly
1   5   10   15

Val Leu Glu Pro Val Ser Ser Phe Trp Arg Phe Lys Leu Asn Ser Asn
                20   25   30

Asn Tyr Val Thr Gln Ser Met Trp Arg Lys Ser Glu Thr Ser His Gly
            35   40   45

Asp Ala Gly Pro Arg Ala Arg Pro Ala Val Trp Pro Ala Leu Leu Thr
        50   55   60

Ser Val Ser Arg Ser Phe Pro Ser His Glu Val Pro Ser Gly His Gly
65   70   75   80

Asp Glu Gly Arg Glu Gly Thr Gly
                85

<210> 1224
<211> 298
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (279)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1224
Ala Thr Arg Arg Arg Ala Ala Glu Ala Gly Met Ala Ala Val Leu Gln
1   5   10   15

Arg Val Glu Arg Leu Ser Asn Arg Val Val Arg Val Leu Gly Cys Asn
                20   25   30

Pro Gly Pro Met Thr Leu Gln Gly Thr Asn Thr Tyr Leu Val Gly Thr
            35   40   45

Gly Pro Arg Arg Ile Leu Ile Asp Thr Gly Glu Pro Ala Ile Pro Glu
        50   55   60

Tyr Ile Ser Cys Leu Lys Gln Ala Leu Thr Glu Phe Asn Thr Ala Ile
65   70   75   80

Gln Glu Ile Val Val Thr His Trp His Arg Asp His Ser Gly Gly Ile
                85   90   95

1249

Gly Asp Ile Cys Lys Ser Ile Asn Asn Asp Thr Thr Tyr Cys Ile Lys
            100   105   110

Lys Leu Pro Arg Asn Pro Gln Arg Glu Glu Ile Ile Gly Asn Gly Glu
            115   120   125

Gln Gln Tyr Val Tyr Leu Lys Asp Gly Asp Val Ile Lys Thr Glu Gly
    130   135   140

Ala Thr Leu Arg Val Leu Tyr Thr Pro Gly His Thr Asp Asp His Met
145   150   155   160

Ala Leu Leu Leu Glu Glu Glu Asn Ala Ile Phe Ser Gly Asp Cys Ile
            165   170   175

Leu Gly Glu Gly Thr Thr Val Phe Glu Asp Leu Tyr Asp Tyr Met Asn
            180   185   190

Ser Leu Lys Glu Leu Leu Lys Ile Lys Ala Asp Ile Ile Tyr Pro Gly
            195   200   205

His Gly Pro Val Ile His Asn Ala Glu Ala Lys Ile Gln Gln Tyr Ile
    210   215   220

Ser His Arg Asn Ile Arg Glu Gln Gln Ile Leu Thr Leu Phe Arg Glu
225   230   235   240

Asn Phe Glu Lys Ser Phe Thr Val Met Glu Leu Val Lys Ile Ile Tyr
            245   250   255

Lys Asn Thr Pro Glu Asn Leu His Glu Met Ala Lys His Asn Leu Leu
            260   265   270

Leu His Leu Lys Lys Leu Xaa Lys Glu Gly Lys Ile Phe Ser Asn Thr
            275   280   285

Asp Pro Asp Lys Lys Trp Lys Ala His Leu
    290   295

<210> 1225
<211> 27
<212> PRT
<213> Homo sapiens

<400> 1225
Val Ser Gly Asp Tyr Gly His Pro Val Tyr Ile Val Gln Asp Gly Pro
    1   5   10   15

1250

```
Pro Gln Ser Pro Pro Asn Ile Tyr Tyr Lys Val
            20                  25
```

<210> 1226
<211> 380
<212> PRT
<213> Homo sapiens

<400> 1226
```
Glu Gln Glu Leu Asp Thr Leu Lys Arg Lys Ser Pro Ser Asp Leu Trp
 1               5                  10                  15

Lys Glu Asp Leu Ala Thr Phe Ile Glu Glu Leu Glu Ala Val Glu Ala
            20                  25                  30

Lys Glu Lys Gln Asp Glu Gln Val Gly Leu Pro Gly Lys Val Gly Lys
        35                  40                  45

Ala Lys Gly Lys Lys Thr Gln Met Ala Glu Val Leu Pro Ser Pro Arg
    50                  55                  60

Gly Gln Arg Val Ile Pro Arg Ile Thr Ile Glu Met Lys Ala Glu Ala
65                  70                  75                  80

Glu Lys Lys Asn Lys Lys Ile Lys Asn Glu Asn Thr Glu Gly Ser
                85                  90                  95

Pro Gln Glu Asp Gly Val Glu Leu Glu Gly Leu Lys Gln Arg Leu Glu
            100                 105                 110

Lys Lys Gln Lys Arg Glu Pro Gly Thr Lys Thr Lys Lys Gln Thr Thr
        115                 120                 125

Leu Ala Phe Lys Pro Ile Lys Lys Gly Lys Lys Arg Asn Pro Trp Ser
    130                 135                 140

Asp Ser Glu Ser Asp Arg Ser Ser Asp Glu Ser Asn Phe Asp Val Pro
145                 150                 155                 160

Pro Arg Glu Thr Glu Pro Arg Arg Ala Ala Thr Lys Thr Lys Phe Thr
                165                 170                 175

Met Asp Leu Asp Ser Asp Glu Asp Phe Ser Asp Phe Asp Glu Lys Thr
            180                 185                 190

Asp Asp Glu Asp Phe Val Pro Ser Asp Ala Ser Pro Pro Lys Thr Lys
        195                 200                 205

Thr Ser Pro Lys Leu Ser Asn Lys Glu Leu Lys Pro Gln Lys Ser Val
```

```
            210                     215                     220

Val Ser Asp Leu Glu Ala Asp Asp Val Lys Gly Ser Val Pro Leu Ser
225                 230                 235                 240

Ser Ser Pro Pro Ala Thr His Phe Pro Asp Glu Thr Glu Ile Thr Asn
                245                 250                 255

Pro Val Pro Lys Lys Asn Val Thr Val Lys Lys Thr Ala Ala Lys Ser
                260                 265                 270

Gln Ser Ser Thr Ser Thr Thr Gly Ala Lys Lys Arg Ala Ala Pro Lys
            275                 280                 285

Gly Thr Lys Arg Asp Pro Ala Leu Asn Ser Gly Val Ser Gln Lys Pro
        290                 295                 300

Asp Pro Ala Lys Thr Lys Asn Arg Arg Lys Arg Lys Pro Ser Thr Ser
305                 310                 315                 320

Asp Asp Ser Asp Ser Asn Phe Glu Lys Ile Val Ser Lys Ala Val Thr
                325                 330                 335

Ser Lys Lys Ser Lys Gly Glu Ser Asp Asp Phe His Met Asp Phe Asp
            340                 345                 350

Ser Ala Val Ala Pro Arg Ala Lys Ser Val Arg Ala Lys Lys Pro Ile
        355                 360                 365

Lys Tyr Leu Glu Glu Ser Asp Glu Asp Asp Leu Phe
    370                 375                 380
```

<210> 1227
<211> 78
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1227
```
Phe Asn Ser Leu Lys Cys Leu Phe Gly Ile Met Ile Gly Asn Leu Asp
  1               5              10                  15

Glu Phe Arg Gly Lys Lys Leu Ser Ala Xaa Met Leu Arg Ala His Leu
            20                  25                  30
```

```
Ser Pro His Thr Pro Thr Glu Leu Thr Gly Leu Gln Cys Phe Ile Arg
        35                  40                  45

Lys Phe Pro Ile Pro Leu Ser Cys Val Phe Met Leu Lys Ile Leu Leu
    50                  55                  60

His Phe Ser Phe Glu Cys Gln Phe Leu Thr Ser Thr Ile Ser
65                  70                  75
```

<210> 1228
<211> 222
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1228
```
Ala Asn Glu Lys Val Ala Leu Gln Lys Ala Leu Leu Tyr Tyr Glu Ser
 1               5                  10                  15

Ile His Gly Arg Pro Val Thr Lys Asn Glu Arg Gln Val Met Lys Pro
            20                  25                  30

Leu Tyr Asp Arg Tyr Arg Leu Val Lys Gln Ile Leu Ser Arg Ala Asn
        35                  40                  45

Thr Ile Pro Ile Ile Gly Ser Pro Ser Ser Lys Arg Arg Ser Pro Leu
    50                  55                  60

Leu Gln Pro Ile Ile Glu Gly Glu Thr Ala Ser Phe Phe Lys Glu Ile
65                  70                  75                  80

Lys Glu Glu Glu Glu Gly Ser Glu Asp Asp Ser Asn Val Lys Pro Asp
                85                  90                  95

Phe Met Val Thr Leu Lys Thr Asp Phe Ser Ala Arg Cys Phe Leu Asp
            100                 105                 110

Gln Phe Glu Asp Asp Ala Asp Gly Phe Ile Ser Pro Met Asp Asp Lys
        115                 120                 125

Ile Pro Ser Lys Cys Ser Gln Asp Thr Gly Leu Ser Asn Xaa His Ala
    130                 135                 140

Ala Ser Ile Pro Glu Leu Leu Glu His Leu Gln Glu Met Arg Glu Glu
145                 150                 155                 160
```

```
Lys Lys Arg Ile Arg Lys Lys Leu Arg Asp Phe Glu Asp Asn Phe Phe
            165             170             175

Arg Gln Asn Gly Arg Asn Val Gln Lys Glu Asp Arg Thr Pro Met Ala
            180             185             190

Glu Glu Tyr Ser Glu Tyr Lys His Ile Lys Ala Lys Leu Arg Leu Leu
            195             200             205

Glu Val Leu Ile Ser Lys Arg Asp Thr Asp Ser Lys Ser Met
    210             215             220
```

<210> 1229
<211> 220
<212> PRT
<213> Homo sapiens

<400> 1229
```
Lys Gly Ser Thr Leu Gly His Leu Cys Thr Ala Met Ala Gly Met Met
  1           5               10              15

Lys Gly Ile Arg Trp Ser Cys Pro Ala Ile Ala Ser Ile Ser Gln Thr
            20              25              30

Arg Ser Ser Gln Glu Lys Asp Ser Ser Ser Pro Pro Trp Asp Leu Arg
            35              40              45

Arg Ala Ala Thr Glu Gly Glu Ala Pro Asp Ala Leu Cys Gln Ser Gln
    50              55              60

Val Arg Gly Gln Ser Ser Pro Cys His Pro Trp Cys Arg Pro Ala Pro
    65              70              75              80

Ser Ser Phe Met Pro Gly Pro Ala Gly Thr Pro Ala Thr Thr Glu Ser
                85              90              95

Thr Arg Ser Ala Leu Cys Ser Trp Arg Arg His Ser Arg Val Glu Ser
            100             105             110

Cys Pro Ser Leu Ser Leu Gly His Leu Gly Gly Glu Ser Gly Leu Arg
            115             120             125

Ser Glu Leu Asp Pro Gly Asp Leu Gly Ser Phe Phe Leu Ala His Gln
            130             135             140

Pro Cys Arg Pro His Leu Ser Gln Asn Pro Leu Cys Leu Gly Gly Ser
145             150             155             160
```

1254

```
Gly Ser Ala Leu Leu Cys Ser Arg Arg Leu Gly Ser Gly Gln His Gln
            165                 170                 175

Val Gly Lys Trp Ser Pro Pro Ser Cys Phe Cys Arg Ile Leu Thr Val
            180                 185                 190

Gly Leu Glu Glu Lys Ser Ile Asp Leu Ile Ser Pro Thr Thr His Pro
        195                 200                 205

Ser Phe Ser Phe Phe His His Ser Pro Pro Gln Leu
    210             215             220
```

<210> 1230
<211> 183
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1230
```
Glu Leu Lys Arg Leu Thr Ile Gly Lys Asn Xaa Xaa Arg Leu Thr Gly
  1               5                 10                  15

Asn Arg Xaa Gly Ile Pro Gly Ser Thr His Ala Ser Glu Xaa Glu Val
            20                  25                  30

Glu Glu Glu Gly Asp Val Asp Ser Asp Glu Glu Glu Glu Asp Glu
        35                  40                  45

Glu Ser Ser Ser Glu Gly Leu Glu Ala Glu Asp Trp Ala Gln Gly Val
    50                  55                  60
```

```
Val Glu Ala Gly Gly Ser Phe Gly Ala Tyr Gly Ala Gln Glu Glu Ala
65              70              75                      80

Gln Cys Pro Thr Leu His Phe Leu Glu Gly Gly Glu Asp Ser Asp Ser
                85              90                      95

Asp Ser Glu Glu Glu Asp Asp Glu Glu Glu Asp Asp Glu Asp Glu Asp
            100             105             110

Asp Asp Asp Asp Glu Glu Asp Gly Asp Glu Val Pro Val Pro Ser Phe
        115             120             125

Gly Glu Ala Met Ala Tyr Phe Ala Met Val Lys Arg Tyr Leu Thr Ser
    130             135             140

Phe Pro Ile Asp Asp Arg Val Gln Ser His Ile Leu His Leu Glu His
145             150             155             160

Asp Leu Val His Val Thr Arg Lys Asn His Ala Arg Gln Ala Gly Val
            165             170             175

Arg Gly Leu Gly His Gln Ser
        180
```

<210> 1231
<211> 59
<212> PRT
<213> Homo sapiens

<400> 1231
```
Asn Leu Tyr Lys Leu Lys Leu Asn His Glu Leu Gln Lys Lys Ser Ile
1               5               10              15

Leu Pro Lys Leu Asp Val Thr Thr Leu Thr Ser Leu Lys Tyr Glu Val
            20              25              30

Asp Cys Leu Lys Asp Ser Ala Tyr Ile Leu Val Cys Thr Phe Arg Asn
        35              40              45

Ile Phe Leu Gly Lys Ser Thr Gln His Phe Leu
    50              55
```

<210> 1232
<211> 135
<212> PRT
<213> Homo sapiens

<400> 1232
Gly Ser Thr His Ala Ser Gly Pro Pro Gln Ala Pro Gln Leu Ile Tyr
1   5   10   15

Gln Glu Tyr Val Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ser Pro
            20   25   30

Arg Glu Gly Pro Leu Pro Ala Ala Arg Pro Ala Gly Ala Thr Leu Glu
        35   40   45

Arg Ala Lys Thr Leu Ser Pro Gly Lys Asn Gly Val Val Lys Asp Val
    50   55   60

Phe Ala Phe Gly Gly Ala Val Glu Asn Pro Glu Tyr Leu Thr Pro Gln
65   70   75   80

Gly Gly Ala Ala Pro Gln Pro His Pro Pro Pro Ala Phe Ser Pro Ala
                85   90   95

Phe Asp Asn Leu Tyr Tyr Trp Asp Gln Asp Pro Pro Glu Arg Gly Ala
            100   105   110

Pro Pro Ser Thr Phe Lys Gly Thr Pro Thr Ala Glu Asn Pro Glu Tyr
            115   120   125

Leu Gly Leu Asp Val Pro Val
    130   135

<210> 1233
<211> 134
<212> PRT
<213> Homo sapiens

<400> 1233
Arg Gly Glu Thr Arg Glu Met Ala Gly Asn Leu Leu Ser Gly Ala Gly
1   5   10   15

Arg Arg Leu Trp Asp Trp Val Pro Leu Ala Cys Arg Ser Phe Ser Leu
            20   25   30

Gly Val Pro Arg Leu Ile Gly Ile Arg Leu Thr Leu Pro Pro Pro Lys
        35   40   45

Val Val Asp Arg Trp Asn Glu Lys Arg Ala Met Phe Gly Val Tyr Asp
    50   55   60

Asn Ile Gly Ile Leu Gly Asn Phe Glu Lys His Pro Lys Glu Leu Ile
65   70   75   80

Arg Gly Pro Ile Trp Leu Arg Gly Trp Lys Gly Asn Glu Leu Gln Arg
           85   90   95

Cys Ile Arg Lys Arg Lys Met Val Gly Ser Arg Met Phe Ala Asp Asp
          100   105   110

Leu His Asn Leu Asn Lys Arg Ile Arg Tyr Leu Tyr Lys His Phe Asn
        115   120   125

Arg His Gly Lys Phe Arg
      130

<210> 1234
<211> 282
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1234
Thr Gly Pro Glu Phe Pro Gly Xaa Pro Thr Arg Pro Arg Thr Ala Ala
 1   5   10   15

Ala Xaa Ser Ala Arg Thr Arg Thr Arg Gly Ser Pro Arg Met Gly Glu
        20   25   30

Phe Asn Glu Lys Lys Thr Thr Cys Gly Thr Val Cys Leu Lys Tyr Leu
       35   40   45

Leu Phe Thr Tyr Asn Cys Cys Phe Trp Leu Ala Gly Leu Ala Val Met
   50   55   60

Ala Val Gly Ile Trp Thr Leu Ala Leu Lys Ser Asp Tyr Ile Ser Leu
65   70   75   80

Leu Ala Ser Gly Thr Tyr Leu Ala Thr Ala Tyr Ile Leu Val Val Ala
        85   90   95

Gly Thr Val Val Met Val Thr Gly Val Leu Gly Cys Cys Ala Thr Phe
       100   105   110

```
Lys Glu Arg Arg Asn Leu Leu Arg Leu Tyr Phe Ile Leu Leu Leu Ile
        115             120             125

Ile Phe Leu Leu Glu Ile Ile Ala Gly Ile Leu Ala Tyr Ala Tyr Tyr
    130             135             140

Gln Gln Leu Asn Thr Glu Leu Lys Glu Asn Leu Lys Asp Thr Met Thr
145             150             155             160

Lys Arg Tyr His Gln Pro Gly His Glu Ala Val Thr Ser Ala Val Asp
            165             170             175

Gln Leu Gln Gln Glu Phe His Cys Cys Gly Ser Asn Asn Ser Gln Asp
            180             185             190

Trp Arg Asp Ser Glu Trp Ile Arg Ser Gln Glu Ala Gly Gly Arg Val
        195             200             205

Val Pro Asp Ser Cys Cys Lys Thr Val Val Ala Leu Cys Gly Gln Arg
    210             215             220

Asp His Ala Ser Asn Ile Tyr Lys Val Glu Gly Gly Cys Ile Thr Lys
225             230             235             240

Leu Glu Thr Phe Ile Gln Glu His Leu Arg Val Ile Gly Ala Val Gly
            245             250             255

Ile Gly Ile Ala Cys Val Gln Val Phe Gly Met Ile Phe Thr Cys Cys
        260             265             270

Leu Tyr Arg Ser Leu Lys Leu Glu His Tyr
        275             280
```

<210> 1235
<211> 66
<212> PRT
<213> Homo sapiens

<400> 1235

```
Ala Glu Ile Gln Val Phe Gln Val Gly Leu Val Ser Trp Gly Leu Tyr
1               5               10              15

Asn Pro Cys Leu Gly Ser Ala Asp Lys Asn Ser Arg Lys Arg Ala Pro
            20              25              30

Arg Ser Lys Val Pro Pro Pro Arg Asp Phe His Ile Asn Leu Phe Arg
        35              40              45
```

```
Met Gln Pro Trp Leu Arg Gln His Leu Gly Asp Val Leu Asn Phe Leu
        50                  55                  60

Pro Leu
65
```

<210> 1236
<211> 108
<212> PRT
<213> Homo sapiens

<400> 1236
```
Ala Arg Arg Arg Arg Gly Gly Trp Ala Gly Gly Gly Gly Thr Arg
 1               5                  10                  15

Arg Ala Leu Gly Val Pro Val Ala Arg Arg Arg Arg Met Trp Arg Ala
            20                  25                  30

Glu Gly Lys Trp Leu Pro Lys Thr Ser Arg Lys Ser Val Ser Gln Ser
        35                  40                  45

Val Phe Cys Gly Thr Ser Thr Tyr Cys Val Leu Asn Thr Val Pro Pro
        50                  55                  60

Ile Glu Asp Asp His Gly Asn Ser Asn Ser Ser His Val Lys Ile Phe
65                  70                  75                  80

Leu Pro Lys Lys Leu Leu Glu Cys Leu Pro Lys Cys Ser Ser Leu Pro
                85                  90                  95

Lys Glu Arg His Arg Trp Asn Thr Asn Glu Arg Ser
            100                 105
```

<210> 1237
<211> 116
<212> PRT
<213> Homo sapiens

<400> 1237
```
Arg Gly Gly Gly Ser Lys Gly Asn Glu Val Arg Pro Val Ala Gly Ser
 1               5                  10                  15

Ala Glu Ser Ala Ala Leu Arg Leu Arg Ala Pro Leu Gln Gln Val Gln
            20                  25                  30

Ala Gln Leu Ser Pro Leu Gln Asn Ile Ser Pro Trp Ile Leu Ala Val
        35                  40                  45
```

```
Leu Thr Leu Gln Ile Gln Ser Leu Ile Ser Cys Trp Ala Phe Trp Thr
    50                  55                  60

Thr Trp Thr Gln Ser Cys Ser Ser Asn Ala Leu Pro Gln Ser Leu Pro
65              70                  75                      80

Ala Trp Arg Ser Ser Gln Arg Ser Thr Gln Lys Asp Pro Val Pro Tyr
                85                  90                  95

Gln Pro Pro Phe Leu Cys Gln Trp Gly Arg His Gln Pro Ser Trp Lys
            100                 105                 110

Pro Leu Met Asn
            115
```

```
<210> 1238
<211> 311
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1238
Val Thr Ser Glu Gly Val Arg Val Arg Ser Ser Arg Gly Arg Ala Xaa
 1               5                  10                  15

Gly Val Trp Arg Phe Glu Arg Asp Glu Asp Gly Thr Gly Ala Gly Cys
            20                  25                  30

Gly Gln Trp Thr Arg Phe Cys Arg Glu Pro Lys Met Ala Val Asn Val
        35                  40                  45

Tyr Ser Thr Ser Val Thr Ser Asp Asn Leu Ser Arg His Asp Met Leu
    50                  55                  60

Ala Trp Ile Asn Glu Ser Leu Gln Leu Asn Leu Thr Lys Ile Glu Gln
65              70                  75                      80

Leu Cys Ser Gly Ala Ala Tyr Cys Gln Phe Met Asp Met Leu Phe Pro
                85                  90                  95

Gly Ser Ile Ala Leu Lys Lys Val Lys Phe Gln Ala Lys Leu Glu His
            100                 105                 110

Glu Tyr Ile Gln Asn Phe Lys Ile Leu Gln Ala Gly Phe Lys Arg Met
```

```
               115                   120                   125

   Gly Val Asp Lys Ile Ile Pro Val Asp Lys Leu Val Lys Gly Lys Phe
       130                   135                   140

   Gln Asp Asn Phe Glu Phe Val Gln Trp Phe Lys Lys Phe Phe Asp Ala
   145                   150                   155                   160

   Asn Tyr Asp Gly Lys Asp Tyr Asp Pro Val Ala Ala Arg Gln Gly Gln
                   165                   170                   175

   Glu Thr Ala Val Ala Pro Ser Leu Val Ala Pro Ala Leu Asn Lys Pro
                   180                   185                   190

   Lys Lys Pro Leu Thr Ser Ser Ser Ala Ala Pro Gln Arg Pro Ile Ser
                   195                   200                   205

   Thr Gln Arg Thr Ala Ala Ala Pro Lys Ala Gly Pro Gly Val Val Arg
       210                   215                   220

   Lys Asn Pro Gly Val Gly Asn Gly Asp Asp Glu Ala Ala Glu Leu Met
   225                   230                   235                   240

   Gln Gln Val Asn Val Leu Lys Leu Thr Val Glu Asp Leu Glu Lys Glu
                   245                   250                   255

   Arg Asp Phe Tyr Phe Gly Lys Leu Arg Asn Ile Glu Leu Ile Cys Gln
                   260                   265                   270

   Glu Asn Glu Gly Glu Asn Asp Pro Val Leu Gln Arg Ile Val Asp Ile
                   275                   280                   285

   Leu Tyr Ala Thr Asp Glu Gly Phe Val Ile Pro Asp Glu Gly Gly Pro
       290                   295                   300

   Gln Glu Glu Gln Glu Glu Tyr
   305                   310
```

<210> 1239
<211> 345
<212> PRT
<213> Homo sapiens

<400> 1239
```
Ala Ala Arg Leu Ala Val Glu Met Lys Thr Asp Leu Leu Ile Val Leu
    1               5                   10                  15

Ser Asp Val Glu Gly Leu Phe Asp Ser Pro Pro Gly Ser Asp Asp Ala
                20                  25                  30
```

1262

```
Lys Leu Ile Asp Ile Phe Tyr Pro Gly Asp Gln Gln Ser Val Thr Phe
         35                  40                 45

Gly Thr Lys Ser Arg Val Gly Met Gly Gly Met Glu Ala Lys Val Lys
         50                  55                 60

Ala Ala Leu Trp Ala Leu Gln Gly Gly Thr Ser Val Val Ile Ala Asn
65                  70                 75                 80

Gly Thr His Pro Lys Val Ser Gly His Val Ile Thr Asp Ile Val Glu
                 85                  90                 95

Gly Lys Lys Val Gly Thr Phe Phe Ser Glu Val Lys Pro Ala Gly Pro
             100                 105                110

Thr Val Glu Gln Gln Gly Glu Met Ala Arg Ser Gly Gly Arg Met Leu
         115                 120                 125

Ala Thr Leu Glu Pro Glu Gln Arg Ala Glu Ile Ile His His Leu Ala
         130                 135                 140

Asp Leu Leu Thr Asp Gln Arg Asp Glu Ile Leu Leu Ala Asn Lys Lys
145                 150                 155                160

Asp Leu Glu Glu Ala Glu Gly Arg Leu Ala Ala Pro Leu Leu Lys Arg
                 165                 170                 175

Leu Ser Leu Ser Thr Ser Lys Leu Asn Ser Leu Ala Ile Gly Leu Arg
             180                 185                 190

Gln Ile Ala Ala Ser Ser Gln Asp Ser Val Gly Arg Val Leu Arg Arg
         195                 200                 205

Thr Arg Ile Ala Lys Asn Leu Glu Leu Glu Gln Val Thr Val Pro Ile
         210                 215                 220

Gly Val Leu Leu Val Ile Phe Glu Ser Arg Pro Asp Cys Leu Pro Gln
225                 230                 235                240

Val Ala Ala Leu Ala Ile Ala Ser Gly Asn Gly Leu Leu Leu Lys Gly
             245                 250                 255

Gly Lys Glu Ala Ala His Ser Asn Arg Ile Leu His Leu Leu Thr Gln
             260                 265                 270

Glu Ala Leu Ser Ile His Gly Val Lys Glu Ala Val Gln Leu Val Asn
         275                 280                 285

Thr Arg Glu Glu Val Glu Asp Leu Cys Arg Leu Asp Lys Met Ile Asp
         290                 295                 300
```

```
Leu Ile Ile Pro Arg Gly Ser Ser Gln Leu Val Arg Asp Ile Gln Lys
305             310             315             320

Ala Ala Lys Gly Ile Pro Val Met Gly His Ser Glu Gly Ile Cys Ala
            325             330             335

His Val Cys Gly Phe Arg Gly Gln Cys
            340             345
```

<210> 1240
<211> 87
<212> PRT
<213> Homo sapiens

<400> 1240

```
Gly Tyr Cys Phe Ile Ser Thr Ser Arg Thr Pro Lys Glu Thr Ile Trp
 1               5               10              15

Val Lys Ala Thr Ser Thr Ala Leu Ala Leu His Arg Phe Leu Glu Phe
            20              25              30

Leu Ser Phe Thr Phe Ser Leu Thr Gln His Cys Leu Leu Phe Val Phe
            35              40              45

Val Ala Trp Phe Val Phe Phe Leu Pro Cys Ser Pro Asn Leu Cys Pro
    50              55              60

Asn Ser Phe Gly Leu Met Gln Lys Tyr Leu Cys Gly Arg Glu Glu Leu
65              70              75              80

Phe Ser Trp Arg Ala Phe Arg
                85
```

<210> 1241
<211> 196
<212> PRT
<213> Homo sapiens

<400> 1241

```
Arg Ala Gly Ser Pro Ala Ser Pro Ala His Val Ala Trp Pro Pro Ala
 1               5               10              15

Pro Thr Trp Ser Arg Ala Leu Pro Arg Val Ala Pro Arg Ser Ser Ser
            20              25              30

Arg Arg Gly Arg Arg Tyr Pro Glu Arg Ser Gln Arg Arg Arg Glu Val
```

1264

```
              35                     40                     45

     Ala Ala Thr Ala Met Pro Lys Asn Lys Gly Lys Gly Gly Lys Asn Arg
          50                  55                  60

     Arg Arg Gly Lys Asn Glu Asn Glu Ser Glu Lys Arg Glu Leu Val Phe
     65                  70                  75                  80

     Lys Glu Asp Gly Gln Glu Tyr Ala Gln Val Ile Lys Met Leu Gly Asn
                      85                  90                  95

     Gly Arg Leu Glu Ala Met Cys Phe Asp Gly Val Lys Arg Leu Cys His
                  100                 105                 110

     Ile Arg Gly Lys Leu Arg Lys Lys Val Trp Ile Asn Thr Ser Asp Ile
              115                 120                 125

     Ile Leu Val Gly Leu Arg Asp Tyr Gln Asp Asn Lys Ala Asp Val Ile
          130                 135                 140

     Leu Lys Tyr Asn Ala Asp Glu Ala Arg Ser Leu Lys Ala Tyr Gly Glu
     145                 150                 155                 160

     Leu Pro Glu His Ala Lys Ile Asn Glu Thr Asp Thr Phe Gly Pro Gly
                  165                 170                 175

     Asp Asp Asp Glu Ile Gln Phe Asp Asp Ile Gly Asp Asp Asp Glu Asp
                  180                 185                 190

     Ile Asp Asp Ile
              195
```

```
<210> 1242
<211> 218
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1242
Ala Val Xaa Phe Lys Asp Xaa Ile Tyr Glu Ile Phe Gln Lys Leu Asn
```

1265

```
       1                 5                      10                    15

    Thr Ser Ile Gln Val Val Leu Leu Ser Ala Thr Met Pro Thr Asp Val
                 20                   25                  30

    Leu Glu Val Thr Lys Lys Phe Met Arg Asp Pro Ile Arg Ile Leu Val
                 35                   40                  45

    Lys Lys Glu Glu Leu Thr Leu Glu Gly Ile Lys Gln Phe Tyr Ile Asn
              50                   55                  60

    Val Glu Arg Glu Glu Trp Lys Leu Asp Thr Leu Cys Asp Leu Tyr Glu
    65                   70                   75                  80

    Thr Leu Thr Ile Thr Gln Ala Val Ile Phe Leu Asn Thr Arg Arg Lys
                    85                   90                  95

    Val Asp Trp Leu Thr Glu Lys Met His Ala Arg Asp Phe Thr Val Ser
                 100                  105                 110

    Ala Leu His Gly Asp Met Asp Gln Lys Glu Arg Asp Val Ile Met Arg
                 115                  120                 125

    Glu Phe Arg Ser Gly Ser Ser Arg Val Leu Ile Thr Thr Asp Leu Leu
                 130                  135                 140

    Ala Arg Gly Ile Asp Val Gln Gln Val Ser Leu Val Ile Asn Tyr Asp
    145                  150                  155                 160

    Leu Pro Thr Asn Arg Glu Asn Tyr Ile His Arg Ile Gly Arg Gly Gly
                    165                  170                 175

    Arg Phe Gly Arg Lys Gly Val Ala Ile Asn Phe Val Thr Glu Glu Asp
                 180                  185                 190

    Lys Arg Ile Leu Arg Asp Ile Glu Thr Phe Tyr Asn Thr Thr Val Glu
                 195                  200                 205

    Glu Met Pro Met Asn Val Ala Asp Leu Ile
        210                  215
```

```
<210> 1243
<211> 173
<212> PRT
<213> Homo sapiens

<400> 1243
Leu Asp Gly Ser Ala Arg Ala Glu Leu Ala Leu Ser Val Ala Val Asn
    1               5                    10                   15
```

```
Val Ala Pro Gly Arg Leu Cys Ala Gly Arg Tyr Ser Ser Asp Val Gln
            20              25              30

Glu Met Ile Leu Ser Ser Ala Thr Ala Asp Arg Ile Pro Ile Ala Val
            35              40              45

Ser Gly Val Arg Gly Met Gly Phe Leu Met Arg His His Ile Glu Thr
        50              55              60

Gly Gly Gly Gln Leu Pro Ala Lys Leu Ser Ser Leu Phe Val Lys Cys
65              70              75              80

Leu Gln Asn Pro Ser Ser Asp Ile Arg Leu Val Ala Glu Lys Met Ile
                85              90              95

Trp Trp Ala Asn Lys Asp Pro Leu Pro Pro Leu Asp Pro Gln Ala Ile
            100             105             110

Lys Pro Ile Leu Lys Ala Leu Leu Asp Asn Thr Lys Asp Lys Asn Thr
        115             120             125

Val Val Arg Ala Tyr Ser Asp Gln Ala Ile Val Asn Leu Leu Lys Met
    130             135             140

Arg Gln Gly Glu Glu Val Phe Gln Ser Leu Ser Lys Ile Leu Asp Val
145             150             155             160

Ala Ser Leu Glu Val Leu Asn Glu Val Asn Arg Ser Pro
                165             170
```

<210> 1244
<211> 222
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1244

```
Tyr Ile Lys Ile Tyr Gln Gly Glu Glu Leu Pro His Pro Lys Ser Met
  1           5               10              15
```

Xaa Gln Ala Thr Ala Glu Ala Asn Asn Leu Ala Ala Val Ala Thr Ala
        20   25   30

Lys Asp Thr Tyr Asn Lys Lys Met Glu Glu Ile Cys Gly Gly Asp Lys
        35   40   45

Pro Phe Leu Ala Pro Asn Asp Leu Gln Thr Lys His Leu Gln Leu Lys
        50   55   60

Glu Glu Ser Val Lys Leu Phe Xaa Gly Val Lys Lys Met Gly Gly Glu
65   70   75   80

Glu Phe Ser Arg Arg Tyr Leu Gln Gln Leu Glu Ser Glu Ile Asp Glu
                85   90   95

Leu Tyr Ile Gln Tyr Ile Lys His Asn Asp Ser Lys Asn Ile Phe His
            100   105   110

Ala Ala Arg Thr Pro Ala Thr Leu Phe Val Val Ile Phe Ile Thr Tyr
            115   120   125

Val Ile Ala Gly Val Thr Gly Phe Ile Gly Leu Asp Ile Ile Ala Ser
    130   135   . 140

Leu Cys Asn Met Ile Met Gly Leu Thr Leu Ile Thr Leu Cys Thr Trp
145   150   155   160

Ala Tyr Ile Arg Tyr Ser Gly Glu Tyr Arg Glu Leu Gly Ala Val Ile
                165   170   175

Asp Gln Val Ala Ala Ala Leu Trp Asp Gln Ala Leu Tyr Lys Leu Tyr
            180   185   190

Ser Ala Ala Ala Thr His Arg His Leu Tyr His Gln Ala Phe Pro Thr
            195   200   205

Pro Lys Ser Glu Ser Thr Glu Gln Ser Glu Lys Lys Lys Met
    210   215   220

<210> 1245
<211> 278
<212> PRT
<213> Homo sapiens

<400> 1245
Ser Ala Glu Asp Val Glu Phe Gln Lys Glu Val Ala Gln Val Arg Lys
    1   5   10   15

1268

```
Arg Ile Thr Gln Arg Lys Lys Gln Glu Gln Leu Thr Pro Gly Val Val
             20                  25              30

Tyr Val Arg His Leu Pro Asn Leu Leu Asp Glu Thr Gln Ile Phe Ser
             35                  40              45

Tyr Phe Ser Gln Phe Gly Thr Val Thr Arg Phe Arg Leu Ser Arg Ser
     50              55              60

Lys Arg Thr Gly Asn Ser Lys Gly Tyr Ala Phe Val Glu Phe Glu Ser
 65              70              75              80

Glu Asp Val Ala Lys Ile Val Ala Glu Thr Met Asn Asn Tyr Leu Phe
             85                  90              95

Gly Glu Arg Leu Leu Glu Cys His Phe Met Pro Pro Glu Lys Val His
         100             105             110

Lys Glu Leu Phe Lys Asp Trp Asn Ile Pro Phe Lys Gln Pro Ser Tyr
         115             120             125

Pro Ser Val Lys Arg Tyr Asn Arg Asn Arg Thr Leu Thr Gln Lys Leu
     130             135             140

Arg Met Glu Glu Arg Phe Lys Lys Lys Glu Arg Leu Leu Arg Lys Lys
145             150             155             160

Leu Ala Lys Lys Gly Ile Asp Tyr Asp Phe Pro Ser Leu Ile Leu Gln
             165             170             175

Lys Thr Glu Ser Ile Ser Lys Thr Asn Arg Gln Thr Ser Thr Lys Gly
             180             185             190

Gln Val Leu Arg Lys Lys Lys Lys Val Ser Gly Thr Leu Asp Thr
             195             200             205

Pro Glu Lys Thr Val Asp Ser Gln Gly Pro Thr Pro Val Cys Thr Pro
     210             215             220

Thr Phe Leu Glu Arg Arg Lys Ser Gln Val Ala Glu Leu Asn Asp Asp
225             230             235             240

Asp Lys Asp Asp Glu Ile Val Phe Lys Gln Pro Ile Ser Cys Val Lys
             245             250             255

Glu Glu Ile Gln Glu Thr Gln Thr Pro Thr His Ser Arg Lys Lys Arg
             260             265             270

Arg Arg Ser Ser Asn Gln
     275
```

```
<210> 1246
<211> 121
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1246
Ser Pro Pro Pro Leu Ser Leu Ile Leu Leu Ser Pro Ile Lys Ala Lys
 1               5                  10                  15

Tyr Gly Leu Thr Thr Ser Pro Lys Ser Val Leu Arg Pro Ser Leu Cys
             20              25                  30

Leu Cys Ala Leu Leu Gly Val Ser Gln Arg Ser Gly Gln Asp Cys Ala
         35              40                  45

Gly Pro Ala Ser Pro Cys Ala Ser Gln Glu His Arg Gln Gly Val Leu
     50              55                  60

Val Ala Val Ala Gly His Leu Ser Pro Ser Ser Leu Leu Asn Val Leu
 65              70              75                      80

Thr Ala Arg Gly Asn Gly Val Ser Phe Pro Thr Lys Lys Pro Leu Leu
             85              90                  95

Tyr Ile Phe Xaa Leu Gln Ser His Arg Leu Gln Thr Thr Leu Leu Phe
             100             105                 110

Phe Met Asp Phe Ser Ala His Phe Arg
         115             120


<210> 1247
<211> 36
<212> PRT
<213> Homo sapiens

<400> 1247
Ile Phe His Arg Val Leu Leu Cys Asp Leu Asn Phe Ser Leu Gly Pro
 1               5                  10                  15

Ala Ser Asp Ile Val Gly Gly Leu Ser Trp Phe Gln Glu Ile Arg Leu
             20              25                  30
```

```
Ala Phe Ser Ser
        35
```

<210> 1248
<211> 184
<212> PRT
<213> Homo sapiens

<400> 1248

```
Trp Ile Pro Arg Ala Cys Arg Glu Phe Gly Thr Arg Phe Gly Gly Val
 1               5                  10                  15

Thr Arg Gly Phe Asn Met Arg Ile Glu Lys Cys Tyr Phe Cys Ser Gly
            20                  25                  30

Pro Ile Tyr Pro Gly His Gly Met Met Phe Val Arg Asn Asp Cys Lys
            35                  40                  45

Val Phe Arg Phe Cys Lys Ser Lys Cys His Lys Asn Phe Lys Lys Lys
        50                  55                  60

Arg Asn Pro Arg Lys Val Arg Trp Thr Lys Ala Phe Arg Lys Ala Ala
65                  70                  75                  80

Gly Lys Glu Leu Thr Val Asp Asn Ser Phe Glu Phe Glu Lys Arg Arg
                85                  90                  95

Asn Glu Pro Ile Lys Tyr Gln Arg Glu Leu Trp Asn Lys Thr Ile Asp
            100                 105                 110

Ala Met Lys Arg Val Glu Glu Ile Lys Gln Lys Arg Gln Ala Lys Phe
            115                 120                 125

Ile Met Asn Arg Leu Lys Lys Asn Lys Glu Leu Gln Lys Val Gln Asp
        130                 135                 140

Ile Lys Glu Val Lys Gln Asn Ile His Leu Ile Arg Ala Pro Leu Ala
145                 150                 155                 160

Gly Lys Gly Lys Gln Leu Glu Glu Lys Met Val Gln Gln Leu Gln Glu
                165                 170                 175

Asp Val Asp Met Glu Asp Ala Pro
                180
```

<210> 1249
<211> 188

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1249
```
Gly Cys Pro Ala His Ser Pro Gly Ser Ala Lys Arg Trp Thr Gln Ala
 1               5                  10        ·        15

Ala Met Ser Arg Pro Arg Met Arg Leu Val Val Thr Ala Asp Asp Phe
            20              25              30

Gly Tyr Cys Pro Arg Arg Asp Glu Gly Ile Val Glu Ala Phe Leu Ala
        35              40              45

Gly Ala Val Thr Ser Val Ser Leu Leu Val Asn Gly Ala Ala Thr Glu
    50              55              60

Ser Ala Ala Glu Leu Ala Arg Arg His Ser Ile Pro Thr Gly Leu His
65              70              75              80

Ala Asn Leu Ser Glu Gly Arg Pro Val Gly Pro Ala Arg Arg Gly Ala
            85              90              95

Ser Ser Leu Leu Gly Pro Glu Xaa Phe Phe Leu Gly Lys Met Gly Phe
            100             105             110

Arg Glu Ala Val Ala Ala Gly Asp Val Asp Leu Pro Gln Val Arg Ser
        115             120             125

Arg Ser Tyr Arg Arg Met Leu Ala Arg Thr Pro Arg Ala Pro Pro Gly
    130             135             140

Gly Thr Val Arg Pro Leu Glu Leu Ala Val Asp Asp Phe Arg Ile Gln
145             150             155             160

Thr Leu Glu Pro Ser His Gly Ser Thr Arg Arg Val Ser Ser Ala Ala
            165             170             175

Thr Pro Gly Arg Ser Arg Cys Leu Ser Leu Ala Leu
            180             185
```

<210> 1250
<211> 201
<212> PRT
<213> Homo sapiens

1272

```
<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1250
Arg Lys Asn Leu Glu Ile Tyr Glu Ala Val Thr Ser Pro Gln Gly Pro
 1               5                  10                   15

Ala Met Thr Trp Ser Met Phe Ala Val Gly Trp Met Glu Leu Lys Asp
                20                  25                  30

Ala Cys Gly Xaa Arg Gly Leu Leu Asp Arg Ser Phe Ala Asn Met Ala
            35                  40                  45

Glu Pro Phe Lys Val Trp Thr Glu Asn Ala Asp Gly Ser Gly Ala Val
    50                  55                  60

Asn Phe Leu Thr Gly Met Gly Gly Phe Leu Gln Ala Val Val Phe Gly
 65                 70                  75                   80

Cys Thr Gly Phe Arg Val Ser Val Ser Gly Ile Phe Tyr Gln Gly Xaa
                85                  90                  95

Xaa Leu Asn Phe Xaa Phe Ser Glu Asp Ser Val Thr Val Glu Val Thr
            100                 105                 110

Ala Arg Ala Gly Pro Trp Ala Pro His Leu Glu Ala Glu Leu Trp Pro
            115                 120                 125

Ser Gln Ser Arg Leu Ser Leu Leu Pro Gly His Lys Val Ser Phe Pro
    130                 135                 140

Arg Ser Ala Gly Arg Ile Gln Met Ser Pro Pro Lys Leu Pro Gly Ser
145                 150                 155                 160
```

```
Ser Ser Ser Glu Phe Pro Gly Arg Thr Phe Ser Asp Val Arg Asp Pro
            165             170             175

Leu Gln Ser Pro Leu Trp Val Thr Leu Gly Ser Ser Ser Pro Thr Glu
            180             185             190

Ser Leu Thr Val Asp Pro Ala Ser Glu
        195             200


<210> 1251
<211> 266
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1251
Ser Val Gly Ser Val Ala Ala Ala Thr Arg Thr Gly Pro Val Ser Xaa
 1           5               10              15

Lys Lys Phe Arg Glu Ala Ser Trp Arg Phe Thr Phe Tyr Leu Ile Ala
            20              25              30

Phe Ile Ala Gly Met Ala Val Ile Val Asp Lys Pro Trp Phe Tyr Asp
        35              40              45

Met Lys Lys Val Trp Glu Gly Tyr Pro Ile Gln Ser Thr Ile Pro Ser
    50              55              60

Gln Tyr Trp Tyr Tyr Met Ile Glu Leu Ser Phe Tyr Trp Ser Leu Leu
65              70              75              80

Phe Ser Ile Ala Ser Asp Val Lys Arg Lys Asp Phe Lys Glu Gln Ile
            85              90              95

Ile His His Val Ala Thr Ile Ile Leu Ile Ser Phe Ser Trp Phe Ala
            100             105             110

Asn Tyr Ile Arg Ala Gly Thr Leu Ile Met Ala Leu His Asp Ser Ser
        115             120             125

Asp Tyr Leu Leu Glu Ser Ala Lys Met Phe Asn Tyr Ala Gly Trp Lys
    130             135             140

Asn Thr Cys Asn Asn Ile Phe Ile Val Phe Ala Ile Val Phe Ile Ile
```

1274

```
       145                  150                  155                  160

       Thr Arg Leu Val Ile Leu Pro Phe Trp Ile Leu His Cys Thr Leu Val
                       165                  170                  175

       Tyr Pro Leu Glu Leu Tyr Pro Ala Phe Phe Gly Tyr Tyr Phe Phe Asn
                       180                  185                  190

       Ser Met Met Gly Val Leu Gln Leu Leu His Ile Phe Trp Ala Tyr Leu
                   195                  200                  205

       Ile Leu Arg Met Ala His Lys Phe Ile Thr Gly Lys Leu Val Glu Asp
                 210                  215                  220

       Glu Arg Ser Asp Arg Glu Glu Thr Glu Ser Ser Glu Gly Glu Glu Ala
     225                  230                  235                  240

       Ala Ala Gly Gly Gly Ala Lys Ser Arg Pro Leu Ala Asn Gly His Pro
                       245                  250                  255

       Ile Leu Asn Asn Asn His Arg Lys Asn Asp
                   260                  265
```

```
<210> 1252
<211> 163
<212> PRT
<213> Homo sapiens

<400> 1252
Lys Met Gly Thr Asn Lys Cys Ala Ser Gln Ala Gly Met Thr Ala Tyr
  1               5                  10                  15

Gly Thr Arg Arg His Leu Tyr Asp Pro Lys Met Gln Thr Asp Lys Pro
               20                  25                  30

Phe Asp Gln Thr Thr Ile Ser Leu Gln Met Gly Thr Asn Lys Gly Ala
           35                  40                  45

Ser Gln Ala Gly Met Leu Ala Pro Gly Thr Arg Arg Asp Ile Tyr Asp
         50                  55                  60

Gln Lys Leu Thr Leu Gln Pro Val Asp Asn Ser Thr Ile Ser Leu Gln
  65                  70                  75                  80

Met Gly Thr Asn Lys Val Ala Ser Gln Lys Gly Met Ser Val Tyr Gly
               85                  90                  95

Leu Gly Arg Gln Val Tyr Asp Pro Lys Tyr Cys Ala Ala Pro Thr Glu
               100                 105                 110
```

```
Pro Val Ile His Asn Gly Ser Gln Gly Thr Gly Thr Asn Gly Ser Glu
        115             120             125

Ile Ser Asp Ser Asp Tyr Gln Ala Glu Tyr Pro Asp Glu Tyr His Gly
        130             135             140

Glu Tyr Gln Asp Asp Tyr Pro Arg Asp Tyr Gln Tyr Ser Asp Gln Gly
145             150             155             160

Ile Asp Tyr


<210> 1253
<211> 298
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1253
Leu Glu Glu Thr Pro Cys Leu Arg Thr Ala Val Ala Cys Glu Gln Arg
  1             5             10             15

Asp Pro Gly Thr Glu Ser Gln Pro Arg Arg Cys Cys Arg Arg Arg Arg
            20             25             30

Pro Glu Thr Ala Glu Pro Val Arg Pro Pro Pro Pro Thr Pro Asp
        35             40             45

Thr Glu His Pro Val Met Asp Lys Asn Glu Leu Val Gln Lys Ala Lys
    50             55             60

Leu Ala Glu Gln Ala Glu Arg Tyr Asp Asp Met Ala Ala Cys Met Lys
65             70             75             80

Ser Val Thr Glu Gln Gly Ala Glu Leu Ser Asn Glu Glu Arg Asn Leu
            85             90             95

Leu Ser Val Ala Tyr Lys Asn Val Val Gly Ala Arg Xaa Ser Ser Trp
        100             105             110

Arg Val Val Ser Ser Ile Glu Gln Lys Thr Glu Gly Ala Glu Lys Lys
        115             120             125

Gln Gln Met Ala Arg Glu Tyr Arg Glu Lys Ile Glu Thr Glu Leu Arg
```

1276

```
        130                 135                 140

Asp Ile Cys Asn Asp Val Leu Ser Leu Leu Glu Lys Phe Leu Ile Pro
145                 150                 155                 160

Asn Ala Ser Gln Ala Glu Ser Lys Val Phe Tyr Leu Lys Met Lys Gly
                165                 170                 175

Asp Tyr Tyr Arg Tyr Leu Ala Glu Val Ala Ala Gly Asp Asp Lys Lys
            180                 185                 190

Gly Ile Val Asp Gln Ser Gln Gln Ala Tyr Gln Glu Ala Phe Glu Ile
            195                 200                 205

Ser Lys Lys Glu Met Gln Pro Thr His Pro Ile Arg Leu Gly Leu Ala
    210                 215                 220

Leu Asn Phe Ser Val Phe Tyr Tyr Glu Ile Leu Asn Ser Pro Glu Lys
225                 230                 235                 240

Ala Cys Ser Leu Ala Lys Thr Ala Phe Asp Glu Ala Ile Ala Glu Leu
            245                 250                 255

Asp Thr Leu Ser Glu Glu Ser Tyr Lys Asp Ser Thr Leu Ile Met Gln
            260                 265                 270

Leu Leu Arg Asp Asn Leu Thr Leu Trp Thr Ser Asp Thr Gln Gly Asp
            275                 280                 285

Glu Ala Glu Ala Gly Glu Gly Gly Glu Asn
    290                 295
```

<210> 1254
<211> 173
<212> PRT
<213> Homo sapiens

<400> 1254
```
Ser Pro Ala Arg Pro Leu Ile Arg Ser Asp Lys Met Lys Glu Thr Ile
1               5                 10                  15

Met Asn Gln Glu Lys Leu Ala Lys Leu Gln Ala Gln Val Arg Ile Gly
                20                  25                  30

Gly Lys Gly Thr Ala Arg Arg Lys Lys Lys Val Val His Arg Thr Ala
            35                  40                  45

Thr Ala Asp Asp Lys Lys Leu Gln Phe Ser Leu Lys Lys Leu Gly Val
    50                  55                  60
```

```
Asn Asn Ile Ser Gly Ile Glu Glu Val Asn Met Phe Thr Asn Gln Gly
65              70              75              80

Thr Val Ile His Phe Asn Asn Pro Lys Val Gln Ala Ser Leu Ala Ala
            85              90              95

Asn Thr Phe Thr Ile Thr Gly His.Ala Glu Thr Lys Gln Leu Thr Glu
            100             105             110

Met Leu Pro Ser Ile Leu Asn Gln Leu Gly Ala Asp Ser Leu Thr Ser
        115             120             125

Leu Arg Arg Leu Ala Glu Ala Leu Pro Lys Gln Ser Val Asp Gly Lys
    130             135             140

Ala Pro Leu Ala Thr Gly Glu Asp Asp Asp Asp Glu Val Pro Asp Leu
145             150             155             160

Val Glu Asn Phe Asp Glu Ala Ser Lys Asn Glu Ala Asn
            165             170
```

```
<210> 1255
<211> 66
<212> PRT
<213> Homo sapiens

<400> 1255
Leu Cys Cys Pro Phe His Ile Lys Glu Leu Leu Thr Thr Lys Ala Ala
1               5               10              15

Pro Ala Phe Pro Ile Cys Leu Ser Ile Trp Leu Ala Gly Lys Glu Arg
            20              25              30

Thr Cys Met Leu Val Lys Glu Glu Val Gly Trp Lys Lys Trp Gly Gly
        35              40              45

Thr Thr Val Lys Ser Arg Val Lys Pro Ser Trp Pro Lys Val Ser Cys
    50              55              60

Arg Leu
65
```

```
<210> 1256
<211> 389
<212> PRT
<213> Homo sapiens
```

<400> 1256
Ala Glu Ala Gly Pro Gly Ala Arg Ala Ala Ala Ala Met Ala Ile Lys
  1   5   10   15

Phe Leu Glu Val Ile Lys Pro Phe Cys Val Ile Leu Pro Glu Ile Gln
             20   25   30

Lys Pro Glu Arg Lys Ile Gln Phe Lys Glu Lys Val Leu Trp Thr Ala
         35   40   45

Ile Thr Leu Phe Ile Phe Leu Val Cys Cys Gln Ile Pro Leu Phe Gly
     50   55   60

Ile Met Ser Ser Asp Ser Ala Asp Pro Phe Tyr Trp Met Arg Val Ile
 65   70   75   80

Leu Ala Ser Asn Arg Gly Thr Leu Met Glu Leu Gly Ile Ser Pro Ile
                 85   90   95

Val Thr Ser Gly Leu Ile Met Gln Leu Leu Ala Gly Ala Lys Ile Ile
             100   105   110

Glu Val Gly Asp Thr Pro Lys Asp Arg Ala Leu Phe Asn Gly Ala Gln
         115   120   125

Lys Leu Phe Gly Met Ile Ile Thr Ile Gly Gln Ser Ile Val Tyr Val
     130   135   140

Met Thr Gly Met Tyr Gly Asp Pro Ser Glu Met Gly Ala Gly Ile Cys
145   150   155   160

Leu Leu Ile Thr Ile Gln Leu Phe Val Ala Gly Leu Ile Val Leu Leu
                 165   170   175

Leu Asp Glu Leu Leu Gln Lys Gly Tyr Gly Leu Gly Ser Gly Ile Ser
             180   185   190

Leu Phe Ile Ala Thr Asn Ile Cys Glu Thr Ile Val Trp Lys Ala Phe
     195   200   205

Ser Pro Thr Thr Val Asn Thr Gly Arg Gly Met Glu Phe Glu Gly Ala
     210   215   220

Ile Ile Ala Leu Phe His Leu Leu Ala Thr Arg Thr Asp Lys Val Arg
225   230   235   240

Ala Leu Arg Glu Ala Phe Tyr Arg Gln Asn Leu Pro Asn Leu Met Asn
                 245   250   255

Leu Ile Ala Thr Ile Phe Val Phe Ala Val Val Ile Tyr Phe Gln Gly

```
            260                    265                    270

Phe Arg Val Asp Leu Pro Ile Lys Ser Ala Arg Tyr Arg Gly Gln Tyr
        275                280                285

Asn Thr Tyr Pro Ile Lys Leu Phe Tyr Thr Ser Asn Ile Pro Ile Ile
    290                295                300

Leu Gln Ser Ala Leu Val Ser Asn Leu Tyr Val Ile Ser Gln Met Leu
305                310                315                320

Ser Ala Arg Phe Ser Gly Asn Leu Leu Val Ser Leu Leu Gly Thr Trp
            325                330                335

Ser Asp Thr Ser Ser Gly Gly Pro Ala Arg Ala Tyr Pro Val Gly Gly
        340                345                350

Leu Cys Tyr Tyr Leu Ser Pro Pro Trp Ser Met Asn Ser Thr Gly Thr
        355                360                365

Ser Pro Gln Pro Arg Pro Leu Val Gly Cys Ala Ser Gly Pro Ser Arg
    370                375                380

Ser Trp Leu Thr Ser
385
```

```
<210> 1257
<211> 191
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1257
Gly Xaa Pro Ser Ser Ser Arg Ala His Ser Pro Met Ile Ala Val Gly
  1                5                10                15

Ser Asp Asp Ser Ser Pro Asn Ala Met Ala Lys Val Gln Ile Phe Glu
            20                25                30

Tyr Asn Glu Asn Thr Arg Lys Tyr Ala Lys Ala Glu Thr Leu Met Thr
            35                40                45

Val Thr Asp Pro Val His Asp Ile Ala Phe Ala Pro Asn Leu Gly Arg
    50                55                60
```

```
Ser Phe His Ile Leu Ala Ile Ala Thr Lys Asp Val Arg Ile Phe Thr
65              70          75              80

Leu Lys Pro Val Arg Lys Glu Leu Thr Ser Ser Gly Gly Pro Thr Lys
        85          90              95

Phe Glu Ile His Ile Val Ala Gln Phe Asp Asn His Asn Ser Gln Val
        100         105             110

Trp Arg Val Ser Trp Asn Ile Thr Gly Thr Val Leu Ala Ser Ser Gly
        115         120             125

Asp Asp Gly Cys Val Arg Leu Trp Lys Ala Asn Tyr Met Asp Asn Trp
    130         135             140

Lys Cys Thr Gly Ile Leu Lys Gly Asn Gly Ser Pro Val Asn Gly Ser
145             150             155             160

Ser Gln Gln Gly Thr Ser Asn Pro Ser Leu Gly Ser Asn Ile Pro Ser
            165             170             175

Leu Gln Asn Ser Leu Asn Gly Ser Ser Ala Gly Arg Lys His Ser
            180             185             190
```

```
<210> 1258
<211> 458
<212> PRT
<213> Homo sapiens

<400> 1258
Pro Gly Ala Arg His Gly Ser Ala Ser Ala Pro Thr Leu Phe Pro Leu
    1           5           10              15

Val Ser Cys Glu Asn Ser Pro Ser Asp Thr Ser Ser Val Ala Val Gly
            20          25              30

Cys Leu Ala Gln Asp Phe Leu Pro Asp Ser Ile Thr Phe Ser Trp Lys
        35          40              45

Tyr Lys Asn Asn Ser Asp Ile Ser Ser Thr Arg Gly Phe Pro Ser Val
        50          55              60

Leu Arg Gly Gly Lys Tyr Ala Ala Thr Ser Gln Val Leu Leu Pro Ser
65              70          75              80

Lys Asp Val Met Gln Gly Thr Asp Glu His Val Val Cys Lys Val Gln
            85          90              95

His Pro Asn Gly Asn Lys Glu Lys Asn Val Pro Leu Pro Val Ile Ala
```

1281

```
                100                    105                    110

    Glu Leu Pro Pro Lys Val Ser Val Phe Val Pro Pro Arg Asp Gly Phe
            115                    120                    125

    Phe Gly Asn Pro Arg Lys Ser Lys Leu Ile Cys Gln Ala Thr Gly Phe
        130                    135                    140

    Ser Pro Arg Gln Ile Gln Val Ser Trp Leu Arg Glu Gly Lys Gln Val
    145                    150                    155                    160

    Gly Ser Gly Val Thr Thr Asp Gln Val Gln Ala Glu Ala Lys Glu Ser
                    165                    170                    175

    Gly Pro Thr Thr Tyr Lys Val Thr Ser Thr Leu Thr Ile Lys Glu Ser
                180                    185                    190

    Asp Trp Leu Ser Gln Ser Met Phe Thr Cys Arg Val Asp His Arg Gly
            195                    200                    205

    Leu Thr Phe Gln Gln Asn Ala Ser Ser Met Cys Val Pro Asp Gln Asp
        210                    215                    220

    Thr Ala Ile Arg Val Phe Ala Ile Pro Pro Ser Phe Ala Ser Ile Phe
    225                    230                    235                    240

    Leu Thr Lys Ser Thr Lys Leu Thr Cys Leu Val Thr Asp Leu Thr Thr
                    245                    250                    255

    Tyr Asp Ser Val Thr Ile Ser Trp Thr Arg Gln Asn Gly Glu Ala Val
                260                    265                    270

    Lys Thr His Thr Asn Ile Ser Glu Ser His Pro Asn Ala Thr Phe Ser
            275                    280                    285

    Ala Val Gly Glu Ala Ser Ile Cys Glu Asp Asp Trp Asn Ser Gly Glu
        290                    295                    300

    Arg Phe Thr Cys Thr Val Thr His Thr Asp Leu Pro Ser Pro Leu Lys
    305                    310                    315                    320

    Gln Thr Ile Ser Arg Pro Lys Gly Val Ala Leu His Arg Pro Asp Val
                325                    330                    335

    Tyr Leu Leu Pro Pro Ala Arg Glu Gln Leu Asn Leu Arg Glu Ser Ala
                340                    345                    350

    Thr Ile Thr Cys Leu Val Thr Gly Phe Ser Pro Ala Asp Val Phe Val
            355                    360                    365

    Gln Trp Met Gln Arg Gly Gln Pro Leu Ser Pro Glu Lys Tyr Val Thr
```

1282

```
        370                  375                  380

Ser Ala Pro Met Pro Glu Pro Gln Ala Pro Gly Arg Tyr Phe Ala His
385                 390                 395                 400

Ser Ile Leu Thr Val Ser Glu Glu Glu Trp Asn Thr Gly Glu Thr Tyr
                405                 410                 415

Thr Cys Val Val Ala His Glu Ala Leu Pro Asn Arg Val Thr Glu Arg
                420                 425                 430

Thr Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu
                435                 440                 445

Val Met Ser Asp Thr Ala Gly Thr Cys Tyr
        450                 455
```

<210> 1259
<211> 247
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1259
```
Ala Gly Pro Ala Pro Glu Glu Pro Arg Gly Gly Ala Ala Ala Arg Trp
  1               5                  10                  15

Asp Cys Gln Pro Cys Gln Ala Ala Xaa Val Val Glu Asn Ser Ala Gln
                20                  25                  30

Arg Val Ile His Leu Ala Gly Gln Trp Glu Lys His Arg Val Pro Leu
                35                  40                  45

Leu Ala Glu Tyr Arg His Leu Arg Lys Leu Gln Asp Cys Arg Glu Leu
        50                  55                  60

Glu Ser Ser Arg Arg Leu Ala Glu Ile Gln Glu Leu His Gln Ser Val
65                  70                  75                  80

Arg Ala Ala Ala Glu Glu Ala Arg Arg Lys Glu Glu Val Tyr Lys Gln
                85                  90                  95

Leu Met Ser Glu Leu Glu Thr Leu Pro Arg Asp Val Ser Arg Leu Ala
                100                 105                 110
```

```
Tyr Thr Gln Arg Ile Leu Glu Ile Val Gly Asn Ile Arg Lys Gln Lys
        115             120             125

Glu Glu Ile Thr Lys Ile Leu Ser Asp Thr Lys Glu Leu Gln Lys Glu
    130             135             140

Ile Asn Ser Leu Ser Gly Lys Leu Asp Arg Thr Phe Ala Val Thr Asp
145             150             155             160

Glu Leu Val Phe Lys Asp Ala Lys Lys Asp Asp Ala Val Arg Lys Ala
                165             170             175

Tyr Lys Tyr Leu Ala Ala Leu His Glu Asn Cys Ser Gln Leu Ile Gln
            180             185             190

Thr Ile Glu Asp Thr Gly Thr Ile Met Arg Glu Val Arg Asp Leu Glu
        195             200             205

Glu Gln Ile Glu Thr Glu Leu Gly Lys Lys Thr Leu Ser Asn Leu Glu
    210             215             220

Lys Ile Arg Glu Asp Tyr Arg Ala Leu Arg Gln Glu Asn Ala Gly Leu
225             230             235             240

Leu Gly Arg Val Arg Glu Ala
                245
```

<210> 1260
<211> 62
<212> PRT
<213> Homo sapiens

<400> 1260
```
Val Gly Ile Lys Trp Ile Glu Glu Ala Val Leu Cys Ala Asn Val Ser
  1           5               10              15

Phe Ala Ser Asp Arg Tyr Leu Phe Val Ile Arg Arg Val Ala Ser Phe
            20              25              30

His Leu Gly Ala Glu Asn Ser Arg Gln Leu Leu Thr Asp Lys Phe Asn
        35              40              45

Leu His Leu Gln Tyr Cys Met Leu Gly Ile Ser Ala Tyr Phe
    50              55              60
```

<210> 1261
<211> 243

1284

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (210)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (226)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1261
Gln Glu Arg Pro Gly Asn Phe Tyr Val Ser Ser Glu Ser Ile Arg Lys
 1   5   10   15

Gly Pro Pro Val Arg Pro Trp Arg Asp Arg Pro Gln Ser Ser Ile Tyr
            20   25   30

Asp Pro Phe Ala Gly Met Lys Thr Pro Gly Gln Arg Gln Leu Ile Thr
            35   40   45

Leu Gln Glu Gln Val Lys Leu Gly Ile Val Asn Val Asp Glu Ala Val
        50   55   60

Leu His Phe Lys Glu Trp Gln Leu Asn Gln Lys Xaa Arg Ser Glu Ser
 65   70   75   80

Phe Arg Phe Gln Gln Glu Asn Leu Lys Arg Leu Arg Asp Ser Ile Thr
                85   90   95

Arg Arg Gln Arg Glu Lys Gln Lys Ser Gly Lys Gln Thr Asp Leu Glu
            100   105   110

Ile Thr Val Pro Ile Arg His Ser Gln His Leu Pro Ala Lys Val Glu
            115   120   125

Phe Gly Val Tyr Glu Ser Gly Pro Arg Lys Ser Val Ile Pro Pro Arg
        130   135   140

Thr Glu Leu Arg Arg Gly Asp Trp Lys Thr Asp Ser Thr Ser Ser Thr
145   150   155   160

Ala Ser Ser Thr Ser Asn Arg Ser Ser Thr Arg Ser Leu Leu Ser Val
                165   170   175

Ser Ser Gly Met Glu Gly Asp Asn Glu Asp Asn Glu Val Pro Glu Val
            180   185   190

Thr Arg Ser Arg Ser Pro Gly Pro Pro Gln Val Asp Gly Thr Pro Thr
        195   200   205

Met Xaa Leu Glu Arg Pro Pro Arg Val Pro Pro Arg Ala Ala Ser Gln
    210   215   220

Arg Xaa Pro Thr Arg Glu Thr Phe His Pro Pro Pro Pro Val Pro Pro
225   230   235   240

Arg Gly Arg

<210> 1262
<211> 75
<212> PRT
<213> Homo sapiens

<400> 1262
Lys Tyr Val Arg Asn Asp Gln Asn Lys Arg Lys Phe Leu Phe Ser Cys
    1   5   10   15

Lys Tyr Phe Ser Ser Val Ile Thr Leu Lys Tyr Lys Leu Lys Tyr Asn
            20   25   30

Thr Pro Glu Cys Leu Arg His Asp Leu Asp Phe Lys Cys Val Val Phe
        35   40   45

Ile Glu Lys Lys Leu Ser Thr His Leu Val Phe Gln Glu Asn Leu Lys
    50   55   60

Arg Ser Gln Gly Lys Met Ile Cys Met Leu Lys
65   70   75

<210> 1263
<211> 475
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (249)
<223> Xaa equals any of the naturally occurring L-amino acids

1286

<400> 1263
Arg Thr Gly Leu Gly Arg Asp Val Gly Ala Gly Ala Arg Arg Ala Ala
 1   5   10   15

Arg Cys Arg Ala Glu Ala Ala Ala Val Gly Thr Ala Arg Ser Pro
            20   25   30

Ala Leu Gly Met Ala Leu Leu Val Leu Gly Leu Val Ser Cys Thr Phe
         35   40   45

Phe Leu Ala Val Asn Gly Leu Tyr Ser Ser Ser Asp Asp Val Ile Glu
     50   55   60

Leu Thr Pro Ser Asn Phe Asn Arg Glu Val Ile Gln Ser Asp Ser Leu
 65   70   75   80

Trp Leu Val Glu Phe Tyr Ala Pro Trp Cys Gly His Cys Gln Arg Leu
                85   90   95

Thr Pro Glu Trp Lys Lys Ala Ala Thr Ala Leu Lys Asp Val Val Lys
            100   105   110

Val Gly Ala Val Asp Ala Asp Lys His His Ser Leu Gly Gly Gln Tyr
        115   120   125

Gly Val Gln Gly Phe Pro Thr Ile Lys Ile Phe Gly Ser Asn Lys Asn
    130   135   140

Arg Pro Glu Asp Tyr Gln Gly Gly Arg Thr Gly Glu Ala Ile Val Asp
145   150   155   160

Ala Ala Leu Ser Ala Leu Arg Gln Leu Val Lys Asp Arg Leu Gly Gly
            165   170   175

Arg Ser Gly Gly Tyr Ser Ser Gly Lys Gln Gly Arg Ser Asp Ser Ser
        180   185   190

Ser Lys Lys Asp Val Ile Glu Leu Thr Asp Asp Ser Phe Asp Lys Asn
        195   200   205

Val Leu Asp Ser Glu Asp Val Trp Met Val Glu Phe Tyr Ala Pro Trp
    210   215   220

Cys Gly His Cys Lys Asn Leu Glu Pro Glu Trp Ala Ala Ala Ala Ser
225   230   235   240

Glu Val Lys Glu Gln Thr Lys Gly Xaa Val Lys Leu Ala Ala Val Asp
            245   250   255

Ala Thr Val Asn Gln Val Leu Ala Ser Arg Tyr Gly Ile Arg Gly Phe
        260   265   270

1287

Pro Thr Ile Lys Ile Phe Gln Lys Gly Glu Ser Pro Val Asp Tyr Asp
        275   280   285

Gly Gly Arg Thr Arg Ser Asp Ile Val Ser Arg Ala Leu Asp Leu Phe
        290   295   300

Ser Asp Asn Ala Pro Pro Pro Glu Leu Leu Glu Ile Ile Asn Glu Asp
305   310   315   320

Ile Ala Lys Arg Thr Cys Glu Glu His Gln Leu Cys Val Val Ala Val
            325   330   335

Leu Pro His Ile Leu Asp Thr Gly Ala Ala Gly Arg Asn Ser Tyr Leu
            340   345   350

Glu Val Leu Leu Lys Leu Ala Asp Lys Tyr Lys Lys Lys Met Trp Gly
        355   360   365

Trp Leu Trp Thr Glu Ala Gly Ala Gln Ser Glu Leu Glu Thr Ala Leu
        370   375   380

Gly Ile Gly Gly Phe Gly Tyr Pro Ala Met Ala Ala Ile Asn Ala Arg
385   390   395   400

Lys Met Lys Phe Ala Leu Leu Lys Gly Ser Phe Ser Glu Gln Gly Ile
            405   410   415

Asn Glu Phe Leu Arg Glu Leu Ser Phe Gly Arg Gly Ser Thr Ala Pro
            420   425   430

Val Gly Gly Gly Ala Phe Pro Thr Ile Val Glu Arg Glu Pro Trp Asp
        435   440   445

Gly Arg Asp Gly Glu Leu Pro Val Glu Asp Asp Ile Asp Leu Ser Asp
        450   455   460

Val Glu Leu Asp Asp Leu Gly Lys Asp Glu Leu
465   470   475

<210> 1264
<211> 398
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1264

His	Phe	Glu	Arg	Thr	Ser	Ser	Lys	Arg	Val	Ser	Arg	Ser	Leu	Asp	Gly
1				5					10					15	

Ala Pro Ile Gly Val Met Asp Gln Ser Leu Met Xaa Asp Phe Pro Gly
        20   25   30

Ala Ala Gly Glu Ile Ser Ala Tyr Gly Pro Gly Leu Val Ser Ile Ala
        35   40   45

Val Val Gln Asp Gly Asp Gly Arg Arg Glu Val Arg Ser Pro Thr Lys
        50   55   60

Ala Pro His Leu Gln Leu Ile Glu Gly Lys Ser Ser His Glu Thr Leu
65   70   75   80

Asn Ile Val Glu Glu Lys Lys Arg Ala Glu Val Gly Lys Asp Glu Arg
                85   90   95

Val Ile Thr Glu Glu Met Asn Gly Lys Glu Ile Ser Pro Gly Ser Gly
            100   105   110

Pro Gly Glu Ile Arg Lys Val Glu Pro Val Thr Gln Lys Asp Ser Thr
        115   120   125

Ser Leu Ser Ser Glu Ser Ser Ser Ser Ser Glu Ser Glu Glu Glu
        130   135   140

Asp Val Gly Glu Tyr Arg Pro His His Arg Val Thr Glu Gly Thr Ile
145   150   155   160

Arg Glu Glu Gln Glu Tyr Glu Glu Glu Val Glu Glu Glu Pro Arg Pro
                165   170   175

Ala Ala Lys Val Val Glu Arg Glu Glu Ala Val Pro Glu Ala Ser Pro
        180   185   190

Val Thr Gln Ala Gly Ala Ser Val Ile Thr Val Glu Thr Val Ile Gln
        195   200   205

Glu Asn Val Gly Ala Gln Lys Ile Pro Gly Glu Lys Ser Val His Glu
    210   215   220

Gly Ala Leu Lys Gln Asp Met Gly Glu Glu Ala Glu Glu Glu Pro Gln
225   230   235   240

Lys Val Asn Gly Glu Val Ser His Val Asp Ile Asp Val Leu Pro Gln
                245   250   255

Ile Ile Cys Cys Ser Glu Pro Pro Val Val Lys Thr Glu Met Val Thr

```
                    260                    265                    270

     Ile Ser Asp Ala Ser Gln Arg Thr Glu Ile Ser Thr Lys Glu Val Pro
             275                    280                    285

     Ile Val Gln Thr Glu Thr Lys Thr Ile Thr Tyr Glu Ser Pro Gln Ile
             290                    295                    300

     Asp Gly Gly Ala Gly Gly Asp Ser Gly Thr Leu Leu Thr Ala Gln Thr
     305                    310                    315                    320

     Ile Thr Ser Glu Ser Val Ser Thr Thr Thr Thr His Ile Thr Lys
                    325                    330                    335

     Thr Val Lys Gly Gly Ile Ser Glu Thr Arg Ile Glu Lys Arg Ile Val
             340                    345                    350

     Ile Thr Gly Asp Gly Asp Ile Asp His Asp Gln Ala Leu Ala Gln Ala
             355                    360                    365

     Ile Arg Glu Ala Arg Glu Gln His Pro Asp Met Ser Val Thr Arg Val
             370                    375                    380

     Val Val His Lys Glu Thr Glu Leu Ala Glu Glu Gly Glu Asp
     385                    390                    395
```

```
<210> 1265
<211> 207
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1265
Trp Thr Gly Thr Gly Arg Gly Ala Val Ala Ile Met Ala Asp Pro Asp
 1                   5                    10                   15

Pro Arg Tyr Pro Arg Ser Ser Ile Glu Asp Asp Phe Asn Tyr Gly Ser
             20                   25                   30

Ser Val Ala Ser Ala Thr Val His Ile Arg Met Ala Phe Leu Arg Lys
             35                   40                   45

Val Tyr Ser Ile Leu Ser Leu Gln Val Leu Leu Thr Thr Val Thr Ser
             50                   55                   60
```

1290

```
Thr Val Phe Leu Tyr Phe Glu Ser Val Arg Thr Phe Val His Glu Ser
65              70              75              80

Pro Ala Leu Ile Leu Leu Phe Ala Leu Gly Ser Leu Gly Leu Ile Phe
                85              90              95

Ala Leu Xaa Leu Asn Arg His Lys Tyr Pro Leu Asn Leu Tyr Leu Leu
        100             105             110

Phe Gly Phe Thr Leu Leu Glu Ala Leu Thr Val Ala Val Val Val Thr
        115             120             125

Phe Tyr Asp Val Tyr Ile Ile Leu Gln Ala Phe Ile Leu Thr Thr Thr
        130             135             140

Val Phe Phe Gly Leu Thr Val Tyr Thr Leu Gln Ser Lys Lys Asp Phe
145             150             155             160

Ser Lys Phe Gly Ala Gly Leu Phe Ala Leu Leu Trp Ile Leu Cys Leu
                165             170             175

Ser Gly Phe Leu Lys Phe Phe Phe Tyr Ser Glu Ile Met Glu Leu Val
        180             185             190

Leu Ala Ala Ala Gly Ala Leu Leu Phe Trp Gly Ile His His Leu
        195             200             205
```

<210> 1266
<211> 289
<212> PRT
<213> Homo sapiens

<400> 1266
```
Ser Arg Asp Pro Asn Gly Trp Trp Arg Arg Leu Arg Val Ser Ala Glu
 1               5               10              15

Leu Ala Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu
                20              25              30

Ala Leu Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala Ala Asp Arg
        35              40              45

Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg
    50              55              60

Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser
65              70              75              80

Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr
```

```
                    85                    90                    95

      Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn
                  100               105               110

      Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val
                  115               120               125

      Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met
          130               135               140

      Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys
      145               150               155               160

      Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys
                  165               170               175

      Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg
                  180               185               190

      Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro
                  195               200               205

      Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly Leu Phe Val
          210               215               220

      Met Val Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr Leu Ile Arg
      225               230               235               240

      Val Ala Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val Trp Ser Ser
                  245               250               255

      Gly Asp Asp Lys Glu Gln Leu Val Lys Asn Thr Tyr Val Leu Cys Arg
                  260               265               270

      Pro Val Ala Lys Arg Thr Gly Glu Gly Arg Gly Asp Met Cys Asp Phe
          275               280               285

      Phe
```

```
<210> 1267
<211> 284
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
```

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1267

Arg Gly Arg Arg Xaa Xaa Ala Ser Leu Arg Gly Trp Pro Val Arg Arg
 1   5   10   15

Gly Met Gly Arg Val Gln Leu Phe Glu Ile Ser Leu Ser His Gly Arg
            20   25   30

Val Val Tyr Ser Pro Gly Glu Pro Leu Ala Gly Thr Val Arg Val Arg
            35   40   45

Leu Gly Ala Pro Leu Pro Phe Arg Ala Ile Arg Val Thr Cys Ile Gly
    50   55   60

Ser Cys Gly Val Ser Asn Lys Ala Asn Asp Thr Ala Trp Val Val Glu
65   70   75   80

Glu Gly Tyr Phe Asn Ser Ser Leu Ser Leu Ala Asp Lys Gly Ser Leu
                85   90   95

Pro Ala Gly Glu His Ser Phe Pro Phe Gln Phe Leu Leu Pro Ala Thr
            100   105   110

Ala Pro Thr Ser Phe Glu Gly Pro Phe Gly Lys Ile Val His Gln Val
            115   120   125

Arg Ala Ala Ile His Thr Pro Arg Phe Ser Lys Asp His Lys Cys Ser
    130   135   140

Leu Val Phe Tyr Ile Leu Ser Pro Leu Asn Leu Asn Ser Ile Pro Asp
145   150   155   160

Ile Glu Gln Pro Asn Val Ala Ser Ala Thr Lys Lys Phe Ser Tyr Lys
                165   170   175

Leu Val Lys Thr Gly Ser Val Val Leu Thr Ala Ser Thr Asp Leu Arg
            180   185   190

Gly Tyr Val Val Gly Gln Ala Leu Gln Leu His Ala Asp Val Glu Asn
            195   200   205

Gln Ser Gly Lys Asp Thr Ser Pro Val Val Ala Ser Leu Leu Gln Lys
    210   215   220

Val Ser Tyr Lys Ala Lys Arg Trp Ile His Asp Val Arg Thr Ile Ala

```
     225                    230                    235                    240
```

Glu Val Glu Gly Ala Gly Val Lys Ala Trp Arg Arg Ala Gln Trp His
                245   250   255

Glu Gln Ile Leu Val Pro Ala Leu Pro Gln Ser Ala Leu Pro Ala Ala
                260   265   270

Ala Ser Ser Thr Ser Thr Thr Thr Tyr Arg Ser Leu
                275   280


```
<210> 1268
<211> 254
<212> PRT
<213> Homo sapiens

<400> 1268
```
Val Trp Leu Arg Val Glu Asn Val Cys Gln Gly Pro Gly Gln Glu Gly
    1   5   10   15

Gly Pro Pro Val Thr Met Val Ser Met Ser Phe Lys Arg Asn Arg Ser
                20   25   30

Asp Arg Phe Tyr Ser Thr Arg Cys Cys Gly Cys Cys His Val Arg Thr
                35   40   45

Gly Thr Ile Ile Leu Gly Thr Trp Tyr Met Val Val Asn Leu Leu Met
        50   55   60

Ala Ile Leu Leu Thr Val Glu Val Thr His Pro Asn Ser Met Pro Ala
65   70   75   80

Val Asn Ile Gln Tyr Glu Val Ile Gly Asn Tyr Tyr Ser Ser Glu Arg
                85   90   95

Met Ala Asp Asn Ala Cys Val Leu Phe Ala Val Ser Val Leu Met Phe
                100   105   110

Ile Ile Ser Ser Met Leu Val Tyr Gly Ala Ile Ser Tyr Gln Val Gly
                115   120   125

Trp Leu Ile Pro Phe Phe Cys Tyr Arg Leu Phe Asp Phe Val Leu Ser
        130   135   140

Cys Leu Val Ala Ile Ser Ser Leu Thr Tyr Leu Pro Arg Ile Lys Glu
145   150   155   160

Tyr Leu Asp Gln Leu Pro Asp Phe Pro Tyr Lys Asp Asp Leu Leu Ala
                165   170   175

```
Leu Asp Ser Ser Cys Leu Leu Phe Ile Val Leu Val Phe Phe Ala Leu
        180                 185             190

Phe Ile Ile Phe Lys Ala Tyr Leu Ile Asn Cys Val Trp Asn Cys Tyr
        195                 200             205

Lys Tyr Ile Asn Asn Arg Asn Val Pro Glu Ile Ala Val Tyr Pro Ala
    210                 215             220

Phe Glu Ala Pro Pro Gln Tyr Val Leu Pro Thr Tyr Glu Met Ala Val
225                 230             235             240

Lys Met Pro Glu Lys Glu Pro Pro Pro Pro Tyr Leu Pro Ala
                245         250
```

<210> 1269
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1269
```
Lys Ser Ile Leu Val Ile Arg Val Tyr Phe Phe Tyr Arg Thr Arg Trp
  1             5                 10              15

Xaa Gly Gly Glu Pro Phe Thr Leu Leu Val Lys Leu Asn His Arg Lys
            20                  25                  30

Phe Thr Ile Cys Leu Ser Gln Thr Leu Ala Val Arg Gly Met Val Ala
```

```
              35                    40                    45
Xaa Ala Cys Xaa Xaa Pro Ala Cys Trp Gly Gly Pro Ser Trp Gly Gly
       50                    55                    60

Leu Pro Glu
 65
```

```
<210> 1270
<211> 164
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (164)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1270
```

```
Gly Ser Pro Gly Thr Xaa Arg Ile Pro Xaa Thr Arg Xaa Glu Thr Cys
1               5               10              15

Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp Thr Tyr Glu
            20              25              30

Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile Gly Ala Gly
        35              40              45

Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His Glu Gly Gly
    50              55              60

Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His Glu Thr Gly
65              70              75              80

Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys Gly Glu Trp
            85              90              95

Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala Ala Gly Thr
            100             105             110

Ser Tyr Val Val Gly Glu Thr Trp Glu Lys Pro Tyr Gln Gly Trp Met
        115             120             125

Met Val Asp Cys Thr Cys Leu Gly Glu Xaa Ser Gly Arg Ile Thr Cys
    130             135             140

Thr Ser Arg Asn Arg Cys Asn Xaa Gln Asp Thr Arg Thr Ser Ile Glu
145             150             155             160

Xaa Glu Thr Xaa
```

```
<210> 1271
<211> 363
<212> PRT
<213> Homo sapiens

<400> 1271
Ala Arg Gly Ser Glu Cys Gly Gln Arg Ala Glu Ala Val Ser His Arg
1               5               10              15

Arg Arg Arg Arg Ala Gln Ala Ser Ser Phe Gly Trp Gly Ala Ala Glu
            20              25              30

Leu Thr Ser Asp Ile Ser Ala Pro Phe Thr Arg Arg Asn Pro Gly Ala
        35              40              45

Gly Ala Arg Ser Ala Gly Val Thr Met Thr Lys Ala Gly Ser Lys Gly
```

```
                  50                      55                      60

      Gly Asn Leu Arg Asp Lys Leu Asp Gly Asn Glu Leu Asp Leu Ser Leu
      65              70              75              80

      Ser Asp Leu Asn Glu Val Pro Val Lys Glu Leu Ala Ala Leu Pro Lys
                      85              90              95

      Ala Thr Ile Leu Asp Leu Ser Cys Asn Lys Leu Thr Thr Leu Pro Ser
                  100             105             110

      Asp Phe Cys Gly Leu Thr His Leu Val Lys Leu Asp Leu Ser Lys Asn
              115             120             125

      Lys Leu Gln Gln Leu Pro Ala Asp Phe Gly Arg Leu Val Asn Leu Gln
          130             135             140

      His Leu Asp Leu Leu Asn Asn Lys Leu Val Thr Leu Pro Val Ser Phe
      145             150             155             160

      Ala Gln Leu Lys Asn Leu Lys Trp Leu Asp Leu Lys Asp Asn Pro Leu
                  165             170             175

      Asp Pro Val Leu Ala Lys Val Ala Gly Asp Cys Leu Asp Glu Lys Gln
              180             185             190

      Cys Lys Gln Cys Ala Asn Lys Val Leu Gln His Met Lys Ala Val Gln
          195             200             205

      Ala Asp Gln Glu Arg Glu Arg Gln Arg Arg Leu Glu Val Glu Arg Glu
          210             215             220

      Ala Glu Lys Lys Arg Glu Ala Lys Gln Arg Ala Lys Glu Ala Gln Glu
      225             230             235             240

      Arg Glu Leu Arg Lys Arg Glu Lys Ala Glu Glu Lys Glu Arg Arg Arg
                  245             250             255

      Lys Glu Tyr Asp Ala Leu Lys Ala Ala Lys Arg Glu Gln Glu Lys Lys
                  260             265             270

      Pro Lys Lys Glu Ala Asn Gln Ala Pro Lys Ser Lys Ser Gly Ser Arg
              275             280             285

      Pro Arg Lys Pro Pro Pro Arg Lys His Thr Arg Ser Trp Ala Val Leu
          290             295             300

      Lys Leu Leu Leu Leu Leu Leu Leu Phe Gly Val Ala Gly Gly Leu Val
      305             310             315             320

      Ala Cys Arg Val Thr Glu Leu Gln Gln Gln Pro Leu Cys Thr Ser Val
```

```
                  325                 330                 335

    Asn Thr Ile Tyr Asp Asn Ala Val Gln Gly Leu Arg Arg His Glu Ile
                340                 345                 350

    Leu Gln Trp Val Leu Gln Thr Asp Ser Gln Gln
            355                 360
```

```
<210> 1272
<211> 144
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1272
Gly Leu Val Met Ala Pro Ile Ala Cys Leu Leu Pro Ala Phe Ser Ser
  1               5                  10                  15

Ala Pro Glu Ala Met His Pro Trp Glu Leu Phe Val Lys Tyr Tyr His
                20                  25                  30

Ala Lys Asn Gly Arg Ala Tyr Val Glu Ser Pro Ala Arg Lys Leu Ser
            35                  40                  45

Gln Ser Phe Ala Leu Pro Val Thr Gly Gly Thr Val Val Thr Pro Lys
        50                  55                  60

Gln Ser Leu Leu Thr Ala Ile His Met Val Leu Thr Glu His Asp Pro
65                  70                  75                  80

Phe Lys Arg Ser Ala Asp Ser Glu Leu Lys Ala Leu Val Cys Met Ala
                85                  90                  95

Leu Asn Glu Pro Ala Ser Gly Val Leu Gly Glu Pro His Leu Gln Xaa
                100                 105                 110
```

```
Arg Val Thr Xaa Arg Ala Ser Leu Pro Ala Leu Xaa Leu His Gly Thr
        115                 120             125

His Arg Leu Leu Lys Ile Ala Ser Thr Cys Ser Val Ala Ser Thr Thr
    130                 135             140
```

<210> 1273
<211> 252
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1273
```
Ala Arg Ala Pro Pro Arg Pro Arg Arg Ala Gly Arg Cys Gln Leu Pro
 1               5               10              15

Gln Arg Pro Ala Glu Ala Arg Cys Met Leu Ser Arg Cys Arg Ser Xaa
            20              25              30

Leu Leu His Val Leu Gly Leu Ser Phe Leu Leu Gln Thr Arg Arg Pro
        35              40              45

Ile Leu Leu Cys Ser Pro Arg Leu Met Lys Pro Leu Val Val Phe Val
    50              55              60

Leu Gly Gly Pro Gly Ala Gly Lys Gly Thr Gln Cys Ala Arg Ile Val
65              70              75              80

Glu Lys Tyr Gly Tyr Thr His Leu Ser Ala Gly Glu Leu Leu Arg Asp
            85              90              95

Glu Arg Lys Asn Pro Asp Ser Gln Tyr Gly Glu Leu Ile Glu Lys Tyr
            100             105             110

Ile Lys Glu Gly Lys Ile Val Pro Val Glu Ile Thr Ile Ser Leu Leu
        115             120             125

Lys Arg Glu Met Asp Gln Thr Met Ala Ala Asn Ala Gln Lys Asn Lys
    130             135             140

Phe Leu Ile Asp Gly Phe Pro Arg Asn Gln Asp Asn Leu Gln Gly Trp
```

1300

```
145                 150                 155                 160

Asn Lys Thr Met Asp Gly Lys Ala Asp Val Ser Phe Val Leu Phe Phe
            165             170             175

Asp Cys Asn Asn Glu Ile Cys Ile Glu Arg Cys Leu Glu Arg Gly Lys
        180             185             190

Ser Ser Gly Arg Ser Asp Asp Asn Arg Glu Ser Leu Glu Lys Arg Ile
        195             200             205

Gln Thr Tyr Leu Gln Ser Thr Lys Pro Ile Ile Asp Leu Tyr Glu Glu
    210             215             220

Met Gly Lys Val Lys Lys Ile Asp Ala Ser Lys Ser Val Asp Glu Val
225             230             235             240

Phe Asp Glu Val Val Gln Ile Phe Asp Lys Glu Gly
            245             250
```

<210> 1274
<211> 425
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 1274
Ala Ser Glu Arg Ser Glu Ala Arg Arg Lys Leu Arg Glu Cys Asp Gly
 1               5               10              15

Leu Val Asp Ala Leu Ile Phe Ile Val Gln Ala Glu Ile Gly Gln Lys
            20              25              30

Asp Ser Xaa Ser Lys Leu Val Glu Asn Cys Val Cys Leu Leu Arg Asn
        35              40              45

Leu Ser Tyr Gln Val His Arg Glu Ile Pro Gln Ala Glu Arg Tyr Gln
    50              55              60

Glu Ala Ala Pro Asn Val Ala Asn Asn Thr Gly Pro His Ala Ala Ser
65              70              75              80

Cys Phe Gly Ala Lys Lys Gly Lys Gly Lys Lys Pro Ile Glu Asp Pro
            85              90              95
```

1301

Ala Asn Asp Thr Val Asp Phe Pro Lys Arg Thr Ser Pro Ala Arg Gly
            100   105   110

Tyr Glu Leu Leu Phe Gln Pro Glu Val Val Arg Ile Tyr Ile Ser Leu
        115   120   125

Leu Lys Glu Ser Lys Thr Pro Ala Ile Leu Glu Ala Ser Ala Gly Ala
    130   135   140

Ile Gln Asn Leu Cys Ala Gly Arg Trp Thr Tyr Gly Arg Tyr Ile Arg
145   150   155   160

Ser Ala Leu Arg Gln Glu Lys Ala Leu Ser Ala Ile Ala Asp Leu Leu
                165   170   175

Thr Asn Glu His Glu Arg Val Val Lys Ala Ala Ser Gly Ala Leu Arg
            180   185   190

Asn Leu Ala Val Asp Ala Arg Asn Lys Glu Leu Ile Gly Lys His Ala
        195   200   205

Ile Pro Asn Leu Val Lys Asn Leu Pro Gly Gly Gln Gln Asn Ser Ser
    210   215   220

Trp Asn Phe Ser Glu Asp Thr Val Ile Ser Ile Leu Asn Thr Ile Asn
225   230   235   240

Glu Val Ile Ala Glu Asn Leu Glu Ala Ala Lys Lys Leu Arg Glu Thr
            245   250   255

Gln Gly Ile Glu Lys Leu Val Leu Ile Asn Lys Ser Gly Asn Arg Ser
            260   265   270

Glu Lys Glu Val Arg Ala Ala Ala Leu Val Leu Gln Thr Ile Trp Gly
        275   280   285

Tyr Lys Glu Leu Arg Lys Pro Leu Glu Lys Glu Gly Trp Lys Lys Ser
    290   295   300

Asp Phe Gln Val Asn Leu Asn Asn Ala Ser Arg Ser Gln Ser Ser His
305   310   315   320

Ser Tyr Asp Asp Ser Thr Leu Pro Leu Ile Asp Arg Asn Gln Lys Ser
                325   330   335

Asp Lys Lys Pro Asp Arg Glu Glu Ile Gln Met Ser Asn Met Gly Ser
            340   345   350

Asn Thr Lys Ser Leu Asp Asn Asn Tyr Ser Thr Pro Asn Glu Arg Gly
            355   360   365

```
Asp His Asn Arg Thr Leu Asp Arg Ser Gly Asp Leu Gly Asp Met Glu
    370             375             380
```

```
Pro Leu Lys Gly Thr Thr Pro Leu Met Gln Asp Glu Gly Gln Glu Ser
385             390             395             400
```

```
Leu Glu Glu Glu Leu Asp Val Leu Val Leu Asp Asp Glu Gly Gly Gln
                405             410             415
```

```
Val Ser Tyr Pro Ser Met Gln Lys Ile
            420             425
```


<210> 1275
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1275
```
Phe Phe Phe Ser Ser Leu Phe Ser Leu Xaa Phe Leu Lys Lys Gly Lys
  1           5               10              15
```

```
Lys Cys Ile Arg Thr Pro Lys Ile Ser Lys Pro Ile Lys Phe Glu Leu
            20              25              30
```

```
Ser Gly Cys Thr Ser Met Lys Thr Tyr Arg Ala Lys Phe Cys Gly Val
        35              40              45
```

```
Cys Thr Asp Gly Arg Cys Cys Thr Pro His Arg Thr Thr Thr Leu Pro
    50              55              60
```

```
Val Glu Phe Lys Cys Pro Asp Gly Glu Val Met Lys Lys Asn Met Met
65              70              75              80
```

```
Phe Ile Lys Thr Cys Ala Cys His Tyr Asn Cys Pro Gly Asp Asn Asp
            85              90              95
```

```
Ile Phe Glu Ser Leu Tyr Tyr Arg Lys Met Tyr Gly Asp Met Ala
            100             105             110
```


<210> 1276
<211> 766
<212> PRT

1303

<213> Homo sapiens

<400> 1276
```
Gly Asp Phe Ile Met Leu Arg Ala Gly Arg Arg Ala Pro Leu Pro Ser
 1               5                  10                 15

Pro Pro Ser Leu Asp Ser Pro Gly Pro Gln Leu Met Pro Ser Pro Arg
             20                  25                 30

Pro Val Leu Leu Arg Gly Ala Arg Ala Ala Leu Leu Leu Leu Leu Pro
         35                  40              .    45

Pro Arg Leu Leu Ala Arg Pro Ser Leu Leu Leu Arg Arg Ser Leu Ser
     50                  55                  60

Ala Ala Ser Cys Ala Pro Ile Ser Leu Pro Ala Ala Ala Ser Arg Ser
65               70                  75                     80

Ser Met Asp Gly Ala Gly Ala Glu Glu Val Leu Ala Pro Leu Arg Leu
             85                  90                 95

Ala Val Arg Gln Gln Gly Asp Leu Val Arg Lys Leu Lys Glu Asp Lys
         100                 105                 110

Ala Pro Gln Val Asp Val Asp Lys Ala Val Ala Glu Leu Lys Ala Arg
         115                 120                 125

Lys Arg Val Leu Glu Ala Lys Glu Leu Ala Leu Gln Pro Lys Asp Asp
     130                 135                 140

Ile Val Asp Arg Ala Lys Met Glu Asp Thr Leu Lys Arg Arg Phe Phe
145             150                 155                 160

Tyr Asp Gln Ala Phe Ala Ile Tyr Gly Gly Val Ser Gly Leu Tyr Asp
             165                 170                 175

Phe Gly Pro Val Gly Cys Ala Leu Lys Asn Asn Ile Ile Gln Thr Trp
             180                 185                 190

Arg Gln His Phe Ile Gln Glu Glu Gln Ile Leu Glu Ile Asp Cys Thr
         195                 200                 205

Met Leu Thr Pro Glu Pro Val Leu Lys Thr Ser Gly His Val Asp Lys
     210                 215                 220

Phe Ala Asp Phe Met Val Lys Asp Val Lys Asn Gly Glu Cys Phe Arg
225             230                 235                 240

Ala Asp His Leu Leu Lys Ala His Leu Gln Lys Leu Met Ser Asp Lys
             245                 250                 255
```

```
Lys Cys Ser Val Glu Lys Lys Ser Glu Met Glu Ser Val Leu Ala Gln
            260             265             270

Leu Asp Asn Tyr Gly Gln Gln Glu Leu Ala Asp Leu Phe Val Asn Tyr
            275             280             285

Asn Val Lys Ser Pro Ile Thr Gly Asn Asp Leu Ser Pro Pro Val Ser
            290             295             300

Phe Asn Leu Met Phe Lys Thr Phe Ile Gly Pro Gly Gly Asn Met Pro
305             310             315             320

Gly Tyr Leu Arg Pro Glu Thr Ala Gln Gly Ile Phe Leu Asn Phe Lys
            325             330             335

Arg Leu Leu Glu Phe Asn Gln Gly Lys Leu Pro Phe Ala Ala Ala Gln
            340             345             350

Ile Gly Asn Ser Phe Arg Asn Glu Ile Ser Pro Arg Ser Gly Leu Ile
            355             360             365

Arg Val Arg Glu Phe Thr Met Ala Glu Ile Glu His Phe Val Asp Pro
            370             375             380

Ser Glu Lys Asp His Pro Lys Phe Gln Asn Val Ala Asp Leu His Leu
385             390             395             400

Tyr Leu Tyr Ser Ala Lys Ala Gln Val Ser Gly Gln Ser Ala Arg Lys
            405             410             415

Met Arg Leu Gly Asp Ala Val Glu Gln Gly Val Ile Asn Asn Thr Val
            420             425             430

Leu Gly Tyr Phe Ile Gly Arg Ile Tyr Leu Tyr Leu Thr Lys Val Gly
            435             440             445

Ile Ser Pro Asp Lys Leu Arg Phe Arg Gln His Met Glu Asn Glu Met
    450             455             460

Ala His Tyr Ala Cys Asp Cys Trp Asp Ala Glu Ser Lys Thr Ser Tyr
465             470             475             480

Gly Trp Ile Glu Ile Val Gly Cys Ala Asp Arg Ser Cys Tyr Asp Leu
            485             490             495

Ser Cys His Ala Arg Ala Thr Lys Val Pro Leu Val Ala Glu Lys Pro
            500             505             510

Leu Lys Glu Pro Lys Thr Val Asn Val Val Gln Phe Glu Pro Ser Lys
            515             520             525
```

Gly Ala Ile Gly Lys Ala Tyr Lys Lys Asp Ala Lys Leu Val Met Glu
     530   535   540

Tyr Leu Ala Ile Cys Asp Glu Cys Tyr Ile Thr Glu Met Glu Met Leu
545   550   555   560

Leu Asn Glu Lys Gly Glu Phe Thr Ile Glu Thr Glu Gly Lys Thr Phe
            565   570   575

Gln Leu Thr Lys Asp Met Ile Asn Val Lys Arg Phe Gln Lys Thr Leu
            580   585   590

Tyr Val Glu Glu Val Val Pro Asn Val Ile Glu Pro Ser Phe Gly Leu
            595   600   605

Gly Arg Ile Met Tyr Thr Val Phe Glu His Thr Phe His Val Arg Glu
            610   615   620

Gly Asp Glu Gln Arg Thr Phe Phe Ser Phe Pro Ala Val Val Ala Pro
625   630   635   640

Phe Lys Cys Ser Val Leu Pro Leu Ser Gln Asn Gln Glu Phe Met Pro
            645   650   655

Phe Val Lys Glu Leu Ser Glu Ala Leu Thr Arg His Gly Val Ser His
            660   665   670

Lys Val Asp Asp Ser Ser Gly Ser Ile Gly Arg Arg Tyr Ala Arg Thr
            675   680   685

Asp Glu Ile Gly Val Ala Phe Gly Val Thr Ile Asp Phe Asp Thr Val
            690   695   700

Asn Lys Thr Pro His Thr Ala Thr Leu Arg Asp Arg Asp Ser Met Arg
705   710   715   720

Gln Ile Arg Ala Glu Ile Ser Glu Leu Pro Ser Ile Val Gln Asp Leu
            725   730   735

Ala Asn Gly Asn Ile Thr Trp Ala Asp Val Glu Ala Arg Tyr Pro Leu
            740   745   750

Phe Glu Gly Gln Glu Thr Gly Lys Lys Glu Thr Ile Glu Glu
            755   760   765

<210> 1277
<211> 386
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1277
Leu Gly Ser Arg Gln Ala Ala Gly Thr Met Arg Gly Gln Arg Ser Leu
 1   5   10   15

Leu Leu Gly Pro Ala Arg Leu Cys Leu Arg Leu Leu Leu Leu Leu Gly
            20   25   30

Tyr Arg Arg Arg Cys Pro Pro Leu Leu Arg Gly Leu Val Gln Arg Trp
        35   40   45

Arg Tyr Gly Lys Val Cys Leu Arg Ser Leu Leu Tyr Asn Ser Phe Gly
        50   55   60

Gly Ser Asp Thr Ala Val Asp Ala Ala Phe Xaa Pro Val Tyr Trp Leu
65   70   75   80

Val Asp Asn Val Ile Arg Trp Phe Gly Val Val Phe Val Val Leu Val
                85   90   95

Ile Val Leu Thr Gly Ser Ile Val Ala Ile Ala Tyr Leu Cys Val Leu
            100   105   110

Pro Leu Ile Leu Arg Thr Tyr Ser Val Pro Arg Leu Cys Trp His Phe
        115   120   125

Phe Tyr Ser His Trp Asn Leu Ile Leu Ile Val Phe His Tyr Tyr Gln
    130   135   140

Ala Ile Thr Thr Pro Pro Gly Tyr Pro Pro Gln Gly Arg Asn Asp Ile
145   150   155   160

Ala Thr Val Ser Ile Cys Lys Lys Cys Ile Tyr Pro Lys Pro Ala Arg
                165   170   175

Thr His His Cys Ser Ile Cys Asn Arg Cys Val Leu Lys Met Asp His
            180   185   190

His Cys Pro Trp Leu Asn Asn Cys Val Gly His Tyr Asn His Arg Tyr
            195   200   205

Phe Phe Ser Phe Cys Phe Phe Met Thr Leu Gly Cys Val Tyr Cys Ser
    210   215   220

Tyr Gly Ser Trp Asp Leu Phe Arg Glu Ala Tyr Ala Ala Ile Glu Lys
225   230   235   240

```
Met Lys Gln Leu Asp Lys Asn Lys Leu Gln Ala Val Ala Asn Gln Thr
              245             250             255

Tyr His Gln Thr Pro Pro Pro Thr Phe Ser Phe Arg Glu Arg Met Thr
              260             265             270

His Lys Ser Leu Val Tyr Leu Trp Phe Leu Cys Ser Ser Val Ala Leu
          275             280             285

Ala Leu Gly Ala Leu Thr Val Trp His Ala Val Leu Ile Ser Arg Gly
      290             295             300

Glu Thr Ser Ile Glu Arg His Ile Asn Lys Lys Glu Arg Arg Arg Leu
305             310             315             320

Gln Ala Lys Gly Arg Val Phe Arg Asn Pro Tyr Asn Tyr Gly Cys Leu
              325             330             335

Asp Asn Trp Lys Val Phe Leu Gly Val Asp Thr Gly Arg His Trp Leu
              340             345             350

Thr Arg Val Leu Leu Pro Ser Ser His Leu Pro His Gly Asn Gly Met
          355             360             365

Ser Trp Glu Pro Pro Pro Trp Val Thr Ala His Ser Ala Ser Val Met
      370             375             380

Ala Val
385
```

```
<210> 1278
<211> 164
<212> PRT
<213> Homo sapiens

<400> 1278
Val Lys Ala Ser Ala Glu Thr Pro Arg Pro Gln Pro Val Asp Lys Leu
  1             5             10             15

Glu Lys Ile Leu Glu Lys Leu Leu Thr Arg Phe Pro Gln Cys Asn Lys
              20             25             30

Ala Gln Met Thr Asn Ile Leu Gln Gln Ile Lys Thr Ala Arg Thr Thr
          35             40             45

Met Ala Gly Leu Thr Met Glu Glu Leu Ile Gln Leu Val Ala Ala Arg
      50             55             60
```

1308

```
Leu Ala Glu His Glu Arg Val Ala Ala Ser Thr Gln Pro Leu Gly Arg
 65              70              75              80

Ile Arg Ala Leu Phe Pro Ala Pro Leu Ala Gln Ile Ser Thr Pro Met
                85              90              95

Phe Leu Pro Ser Ala Gln Val Ser Tyr Pro Gly Arg Ser Ser His Ala
            100             105             110

Pro Ala Thr Cys Lys Leu Cys Leu Met Cys Gln Lys Leu Val Gln Pro
        115             120             125

Ser Glu Leu His Pro Met Ala Cys Thr His Val Leu His Lys Glu Cys
    130             135             140

Ile Lys Phe Trp Ala Gln Thr Asn Thr Asn Asp Thr Cys Pro Phe Cys
145             150             155             160

Pro Thr Leu Lys
```

```
<210> 1279
<211> 469
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1279
Pro Val Ala Val Gly Arg Val Arg Val Thr Ala Glu Gly Arg Xaa Met
 1           5               10              15

Val Leu Gln Thr Thr Lys Gly Leu Arg Leu Leu Phe Asp Gly Asp Ala
            20              25              30

His Leu Leu Met Ser Ile Pro Ser Pro Phe Arg Gly Arg Leu Cys Gly
        35              40              45

Leu Cys Gly Asn Phe Asn Gly Asn Trp Ser Asp Asp Phe Val Leu Pro
    50              55              60
```

1309

```
Asn Gly Ser Ala Ala Ser Ser Val Glu Thr Phe Gly Ala Ala Trp Arg
65              70              75              80

Xaa Pro Gly Ser Ser Lys Gly Cys Gly Glu Gly Cys Gly Pro Gln Gly
            85              90              95

Cys Pro Val Cys Leu Ala Glu Glu Thr Ala Pro Tyr Glu Ser Asn Glu
        100             105             110

Ala Cys Gly Gln Leu Arg Asn Pro Gln Gly Pro Phe Ala Thr Cys Gln
        115             120             125

Ala Val Leu Ser Pro Ser Glu Tyr Phe Arg Gln Cys Val Tyr Asp Leu
        130             135             140

Cys Ala Gln Lys Gly Asp Lys Ala Phe Leu Cys Arg Ser Leu Ala Ala
145             150             155             160

Tyr Thr Ala Ala Cys Gln Ala Ala Gly Val Ala Val Lys Pro Trp Arg
            165             170             175

Thr Asp Ser Phe Cys Pro Leu His Cys Pro Ala His Ser His Tyr Ser
            180             185             190

Ile Cys Thr Arg Thr Cys Gln Gly Ser Cys Ala Ala Leu Ser Gly Leu
    195             200             205

Thr Gly Cys Thr Thr Arg Cys Phe Glu Gly Cys Glu Cys Asp Asp Arg
    210             215             220

Phe Leu Leu Ser Gln Gly Val Cys Ile Pro Val Gln Asp Cys Gly Cys
225             230             235             240

Thr His Asn Gly Arg Tyr Leu Pro Val Asn Ser Ser Leu Leu Thr Ser
            245             250             255

Asp Cys Ser Glu Arg Cys Ser Cys Ser Ser Ser Ser Gly Leu Thr Cys
        260             265             270

Gln Ala Ala Gly Cys Pro Pro Gly Arg Val Cys Glu Val Lys Ala Glu
        275             280             285

Ala Arg Asn Cys Trp Ala Thr Arg Gly Leu Cys Val Leu Ser Val Gly
        290             295             300

Ala Asn Leu Thr Thr Phe Asp Gly Ala Arg Gly Ala Thr Thr Ser Pro
305             310             315             320

Gly Val Tyr Glu Leu Ser Ser Arg Cys Pro Gly Leu Gln Asn Thr Ile
            325             330             335
```

1310

```
Pro Trp Tyr Arg Val Val Ala Glu Val Gln Ile Cys His Gly Lys Thr
            340             345             350

Glu Ala Val Gly Gln Val His Ile Phe Phe Gln Asp Gly Met Val Thr
            355             360             365

Leu Thr Pro Asn Lys Gly Val Trp Val Asn Gly Leu Arg Val Asp Leu
    370             375             380

Pro Ala Glu Lys Leu Ala Ser Val Ser Val Ser Arg Thr Pro Asp Gly
385             390             395             400

Ser Leu Leu Val Arg Gln Lys Ala Gly Val Gln Val Trp Leu Gly Ala
            405             410             415

Asn Gly Lys Val Ala Val Ile Val Ser Asn Asp His Ala Gly Lys Leu
            420             425             430

Cys Gly Ala Cys Gly Asn Phe Asp Gly Asp Gln Thr Asn Asp Trp His
            435             440             445

Asp Ser Gln Glu Lys Pro Ala Met Glu Lys Trp Arg Ala Gln Asp Phe
    450             455             460

Ser Pro Cys Tyr Gly
465
```

```
<210> 1280
<211> 223
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (217)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1280
Gly Pro Arg Ala Leu Trp Pro Pro Pro Glu Val Gly Trp Gly Cys Ser
  1           5               10              15

Pro Asn Pro Thr Leu Leu Pro Pro Leu Ser His Phe Pro Leu Leu Arg
            20              25              30
```

1311

```
Trp Gly Thr Asn Asn Lys Glu Leu Thr Leu Pro Ala Pro Asn Pro Pro
        35              40              45

Pro Ala Pro Pro Cys Pro Pro Arg Phe Trp Phe His Phe Ser Ser Val
        50              55              60

His Lys Leu Pro Leu Asp Ser Cys Val Val Phe Cys Ser Met Phe His
65              70              75              80

Ser Ser Thr Ser Val Ile Ala Ala Ala Thr Ser Ala Lys Cys Ser Ser
                85              90              95

Ser Leu Pro Pro Val Leu Pro Thr Ile Pro Ser Pro Lys Ile Leu Phe
        100             105             110

Val Gly Lys Arg Gly Trp Gly Met Ala Gly Trp Val Thr Asp Tyr Pro
        115             120             125

Ser Pro Arg Glu Gly Gly Ala Leu Pro Leu Gly Cys Cys Ser Arg Val
        130             135             140

Ser Lys Gly Ala Arg Ile Asp His Lys Gly Cys Arg Gly His Leu Leu
145             150             155             160

Pro Leu Phe Cys Trp Gly Gly Val Ala Met Ile Cys Pro Ser Leu Gly
                165             170             175

Leu Pro Leu Trp Phe Pro Ile Cys Ser Tyr Leu Asn Lys Lys Asn Ile
                180             185             190

Leu Phe Trp Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
        195             200             205

Lys Lys Lys Lys Lys Lys Lys Xaa Xaa Gly Gly Ala Pro Pro Pro
        210             215             220
```

```
<210> 1281
<211> 37
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1281
Thr Gln Ser Lys Trp Arg Leu Glu Val Gln Cys Gly Lys Glu Lys Gln
    1           5               10              15
```

```
Val Phe Ile Glu Ser Thr Asn Ser Thr Pro Phe Lys Asn Phe Xaa Gly
             20                  25                  30

Thr Gln Pro Lys Gly     ·
            35
```

<210> 1282
<211> 458
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (249)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1282

```
Gly Pro Gln Arg Leu Ser Pro Gly Ala Met Leu Pro Ala Ala Thr Ala
  1               5                  10                  15

Ser Leu Leu Gly Pro Leu Leu Thr Ala Cys Ala Leu Leu Pro Phe Ala
             20                  25                  30

Gln Gly Gln Thr Pro Asn Tyr Thr Arg Pro Val Phe Leu Cys Gly Gly
            35                  40                  45

Asp Val Lys Gly Glu Ser Gly Tyr Val Ala Ser Glu Gly Phe Pro Asn
     50                  55                  60

Leu Tyr Pro Pro Asn Lys Glu Cys Ile Trp Thr Ile Thr Val Pro Glu
 65                  70                  75                  80

Gly Gln Thr Val Ser Leu Ser Phe Arg Val Phe Asp Leu Glu Leu His
             85                  90                  95

Pro Ala Cys Arg Tyr Asp Ala Leu Glu Val Phe Ala Gly Ser Gly Thr
            100                 105                 110

Ser Gly Gln Arg Leu Gly Arg Phe Cys Gly Thr Phe Arg Pro Ala Pro
            115                 120                 125

Leu Val Ala Pro Gly Asn Gln Val Thr Leu Arg Met Thr Thr Asp Glu
     130                 135                 140

Gly Thr Gly Gly Arg Gly Phe Leu Leu Trp Tyr Ser Gly Arg Ala Thr
145                 150                 155                 160

Ser Gly Thr Glu His Gln Phe Cys Gly Gly Arg Leu Glu Lys Ala Gln
```

1313

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165   170   175

</div>

Gly Thr Leu Thr Thr Pro Asn Trp Pro Glu Ser Asp Tyr Pro Pro Gly
        180   185   190

Ile Ser Cys Ser Trp His Ile Ile Ala Pro Pro Asp Gln Val Ile Ala
        195   200   205

Leu Thr Phe Glu Lys Phe Asp Leu Glu Pro Asp Thr Tyr Cys Arg Tyr
    210   215   220

Asp Ser Val Ser Val Phe Asn Gly Ala Val Ser Asp Asp Ser Arg Arg
225   230   235   240

Leu Gly Lys Phe Cys Gly Asp Ala Xaa Pro Gly Ser Ile Ser Ser Glu
            245   250   255

Gly Asn Glu Leu Leu Val Gln Phe Val Ser Asp Leu Ser Val Thr Ala
        260   265   270

Asp Gly Phe Ser Ala Ser Tyr Lys Thr Leu Pro Arg Gly Thr Ala Lys
        275   280   285

Glu Gly Gln Gly Pro Gly Pro Lys Arg Gly Thr Glu Pro Lys Val Lys
    290   295   300

Leu Pro Pro Lys Ser Gln Pro Pro Glu Lys Thr Glu Glu Ser Pro Ser
305   310   315   320

Ala Pro Asp Ala Pro Thr Cys Pro Lys Gln Cys Arg Arg Thr Gly Thr
            325   330   335

Leu Gln Ser Asn Phe Cys Ala Ser Ser Leu Val Val Thr Ala Thr Val
        340   345   350

Lys Ser Met Val Arg Glu Pro Gly Glu Gly Leu Ala Val Thr Val Ser
        355   360   365

Leu Ile Gly Ala Tyr Lys Thr Gly Gly Leu Asp Leu Pro Ser Pro Pro
    370   375   380

Thr Gly Ala Ser Leu Lys Phe Tyr Val Pro Cys Lys Gln Cys Pro Pro
385   390   395   400

Met Lys Lys Gly Val Ser Tyr Leu Leu Met Gly Gln Val Glu Glu Asn
            405   410   415

Arg Gly Pro Val Leu Pro Pro Glu Ser Phe Val Val Leu His Arg Pro
        420   425   430

Asn Gln Asp Gln Ile Leu Thr Asn Leu Ser Lys Arg Lys Cys Pro Ser

1314

```
              435                    440                    445
    Gln Pro Val Arg Ala Ala Ala Ser Gln Asp
        450                455
```

<210> 1283
<211> 229
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (154)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (155)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1283
```
Cys Arg Ala Pro Leu Gly Ala Gly Leu Ser Pro Ala Val Arg Arg Gln
 1               5                  10                 15

Glu Pro Pro Phe Pro Leu Gly Val Thr Arg Gly Trp Gly Arg Trp Pro
            20                 25                 30

Ile Gln Lys Arg Arg Glu Gly Ala Arg Pro Val Pro Xaa Ser Glu Arg
        35                 40                 45

Ser Gln Glu Asp Gly Arg Gly Pro Ala Ala Arg Ser Ser Gly Thr Leu
    50                 55                 60

Trp Arg Ile Arg Thr Arg Leu Ser Leu Cys Arg Asp Pro Glu Pro Pro
65                 70                 75                 80

Pro Pro Leu Cys Leu Leu Arg Val Ser Leu Leu Cys Ala Leu Arg Ala
            85                 90                 95

Gly Gly Arg Gly Ser Arg Trp Gly Glu Asp Gly Ala Arg Leu Leu Leu
        100                105                110

Leu Pro Pro Ala Arg Ala Ala Gly Asn Gly Glu Ala Glu Pro Ser Gly
    115                120                125
```

1315

Gly Pro Ser Tyr Ala Gly Arg Met Leu Glu Ser Ser Gly Cys Lys Ala
    130   135   140

Leu Lys Glu Gly Val Leu Glu Lys Arg Xaa Xaa Gly Cys Cys Ser Ser
145   150   155   160

Gly Arg Lys Ser Val Ala Ser Ser Pro Arg Lys Gly Cys Cys Leu Ser
                165   170   175

Arg Pro Ser Ser Cys Asn Thr Ser Ser Ser Ser Asn Ser Ser Ser Ser
            180   185   190

Ser Ser Asn Asn Ser Pro Gly Arg Gly Arg Pro Ser Arg Pro Asn Pro
        195   200   205

Val Ala Pro Leu Ser Pro Ala Ser Ser Arg Arg Ser Ser Ser Arg Asn
    210   215   220

Cys Thr Ser Pro Thr
225

<210> 1284
<211> 390
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1284
Thr Ser Val Ala Ala Ala Ala Arg Gly Arg Ala Gly Cys Pro Leu
    1   5   10   15

Thr Ala Ala Ser Ala Ala Arg Phe Lys Met Ala Ala Cys Ser His Ser
            20   25   30

Phe Ser Ala Glu Arg Leu Leu Thr Phe Ile Val Phe Ser Ala Arg Phe
        35   40   45

Asp Arg Leu Xaa Pro Ala Ala Leu Ser Gly Ile Phe Tyr Gln Ala Glu
    50   55   60

Met His Arg Thr Thr Arg Ile Lys Ile Thr Glu Leu Asn Pro His Leu
65   70   75   80

Met Cys Val Leu Cys Gly Gly Tyr Phe Ile Asp Ala Thr Thr Ile Ile

1316

			85					90					95	

Glu Cys Leu His Ser Phe Cys Lys Thr Cys Ile Val Arg Tyr Leu Glu
    100   105   110

Thr Ser Lys Tyr Cys Pro Ile Cys Asp Val Gln Val His Lys Thr Arg
    115   120   125

Pro Leu Leu Asn Ile Arg Ser Asp Lys Thr Leu Gln Asp Ile Val Tyr
  130   135   140

Lys Leu Val Pro Gly Leu Phe Lys Asn Glu Met Lys Arg Arg Arg Asp
145   150   155   160

Phe Tyr Ala Ala His Pro Ser Ala Asp Ala Ala Asn Gly Ser Asn Glu
    165   170   175

Asp Arg Gly Glu Val Ala Asp Glu Asp Lys Arg Ile Ile Thr Asp Asp
    180   185   190

Glu Ile Ile Ser Leu Ser Ile Glu Phe Phe Asp Gln Asn Arg Leu Asp
    195   200   205

Arg Lys Val Asn Lys Asp Lys Glu Lys Ser Lys Glu Glu Val Asn Asp
  210   215   220

Lys Arg Tyr Leu Arg Cys Pro Ala Ala Met Thr Val Met His Leu Arg
225   230   235   240

Lys Phe Leu Arg Ser Lys Met Asp Ile Pro Asn Thr Phe Gln Ile Asp
    245   250   255

Val Met Tyr Glu Glu Glu Pro Leu Lys Asp Tyr Tyr Thr Leu Met Asp
    260   265   270

Ile Ala Tyr Ile Tyr Thr Trp Arg Arg Asn Gly Pro Leu Pro Leu Lys
    275   280   285

Tyr Arg Val Arg Pro Thr Cys Lys Arg Met Lys Ile Ser His Gln Arg
  290   295   300

Asp Gly Leu Thr Asn Ala Gly Glu Leu Glu Ser Asp Ser Gly Ser Asp
305   310   315   320

Lys Ala Asn Ser Pro Ala Gly Gly Ile Pro Ser Thr Ser Ser Cys Leu
    325   330   335

Pro Ser Pro Ser Thr Pro Val Gln Ser Pro His Pro Gln Phe Pro His
    340   345   350

Ile Ser Ser Thr Met Asn Gly Thr Ser Asn Ser Pro Ser Gly Asn His

```
               355                 360                 365
   Gln Ser Ser Phe Ala Asn Arg Pro Arg Lys Ser Ser Val Asn Gly Ser
          370                 375             380

   Ser Ala Thr Ser Ser Gly
   385                 390



   <210> 1285
   <211> 39
   <212> PRT
   <213> Homo sapiens

   <400> 1285
   His Ala Ser Ala Gly Ser Gln Leu Phe Glu Met His Glu Lys Leu Ser
     1               5               10                  15

   Cys Met Ala Asn Ser Val Ile Lys Asn Leu Gln Ser Arg Trp Arg Ser
               20                  25                  30

   Pro Ser His Glu Asn Ser Ile
            35



   <210> 1286
   <211> 453
   <212> PRT
   <213> Homo sapiens

   <220>
   <221> SITE
   <222> (38)
   <223> Xaa equals any of the naturally occurring L-amino acids

   <220>
   <221> SITE
   <222> (101)
   <223> Xaa equals any of the naturally occurring L-amino acids

   <220>
   <221> SITE
   <222> (110)
   <223> Xaa equals any of the naturally occurring L-amino acids

   <220>
   <221> SITE
   <222> (286)
   <223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1286
Arg Arg Ser Val Ile Cys Asp Ser Asn Ala Thr Ala Leu Glu Leu Pro
 1   5   10   15

Gly Leu Pro Leu Ser Leu Pro Gln Pro Ser Ile Pro Ala Ala Val Pro
            20   25   30

Gln Ser Ala Pro Pro Xaa Pro His Arg Glu Glu Thr Val Thr Ala Thr
        35   40   45

Ala Thr Ser Gln Val Ala Gln Gln Pro Pro Ala Ala Ala Ala Pro Gly
        50   55   60

Glu Gln Ala Val Ala Gly Pro Ala Pro Arg Leu Ser Pro Ala Val Pro
65   70   75   80

Ala Lys Thr Ala Gln Cys Pro Ser Leu Ala Leu Trp Gly Ala Lys Arg
            85   90   95

Ser Arg Arg Arg Xaa Lys Val Ala Ala Ala Ala Gln Ala Xaa Lys Glu
            100   105   110

Pro Gln Glu Glu Arg Ser Gln Gln Gln Asp Asp Ile Glu Glu Leu Glu
        115   120   125

Thr Lys Ala Val Gly Met Ser Asn Asp Gly Arg Phe Leu Lys Phe Asp
    130   135   140

Ile Glu Ile Gly Arg Gly Ser Phe Lys Thr Val Tyr Lys Gly Leu Asp
145   150   155   160

Thr Glu Thr Thr Val Glu Val Ala Trp Cys Glu Leu Gln Asp Arg Lys
            165   170   175

Leu Thr Lys Ser Glu Arg Gln Arg Phe Lys Glu Glu Ala Glu Met Leu
        180   185   190

Lys Gly Leu Gln His Pro Asn Ile Val Arg Phe Tyr Asp Ser Trp Glu
        195   200   205

Ser Thr Val Lys Gly Lys Lys Cys Ile Val Leu Val Thr Glu Leu Met
    210   215   220

Thr Ser Gly Thr Leu Lys Thr Tyr Leu Lys Arg Phe Lys Val Met Lys
225   230   235   240

Ile Lys Val Leu Arg Ser Trp Cys Arg Gln Ile Leu Lys Gly Leu Gln
            245   250   255

Phe Leu His Thr Arg Thr Pro Pro Ile Ile His Arg Asp Leu Lys Cys

```
           260                265                270

Asp Asn Ile Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Xaa Gly Asp
        275             280             285

Leu Gly Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile
        290             295             300

Gly Thr Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp
305             310             315             320

Glu Ser Val Asp Val Tyr Ala Phe Gly Met Cys Met Leu Glu Met Ala
            325             330             335

Thr Ser Glu Tyr Pro Tyr Ser Glu Cys Gln Asn Ala Ala Gln Ile Tyr
        340             345             350

Arg Arg Val Thr Ser Gly Val Lys Pro Ala Ser Phe Asp Lys Val Ala
        355             360             365

Ile Pro Glu Val Lys Glu Ile Ile Glu Gly Cys Ile Arg Gln Asn Lys
    370             375             380

Asp Glu Arg Tyr Ser Ile Lys Asp Leu Leu Asn His Ala Phe Phe Gln
385             390             395             400

Glu Glu Thr Gly Val Arg Val Glu Leu Ala Glu Glu Asp Asp Gly Glu
            405             410             415

Lys Ile Ala Ile Lys Leu Trp Leu Arg Ile Glu Asp Ile Lys Lys Leu
        420             425             430

Lys Gly Lys Tyr Lys Asp Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
        435             440             445

Asn Thr His Arg Ala
    450
```

<210> 1287
<211> 450
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (193)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (314)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (326)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (344)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1287
Ala Ala Glu Val Leu Cys Pro Ser Cys Phe Pro Ile Ser Pro Ala Pro
 1               5                  10                  15

Trp Met Thr Val Gly Pro Ala Ser Ala Leu Phe Pro Cys Gln Thr Pro
            20                  25                  30

Xaa Phe Pro Trp Thr Glu Trp Asn Xaa Trp Xaa Phe Thr Ala His Val
         35                  40                  45

Leu Ser Gln Lys Phe Glu Lys Glu Leu Ser Lys Val Arg Glu Tyr Val
      50                  55                  60

Gln Leu Ile Ser Val Tyr Glu Lys Lys Leu Leu Asn Leu Thr Val Arg
 65                  70                  75                  80

Ile Asp Ile Met Glu Lys Asp Thr Ile Ser Tyr Thr Glu Leu Asp Phe
```

1321

```
                    85                  90                  95

    Glu Leu Ile Lys Val Glu Val Lys Glu Met Glu Lys Leu Val Ile Gln
                100                 105                 110

    Leu Lys Glu Xaa Phe Gly Gly Ser Ser Glu Ile Val Asp Gln Leu Glu
                115                 120                 125

    Val Glu Ile Arg Asn Met Thr Leu Leu Val Glu Lys Leu Glu Thr Leu
        130                 135                 140

    Asp Lys Asn Asn Val Leu Ala Ile Arg Arg Glu Ile Val Ala Leu Lys
    145                 150                 155                 160

    Thr Lys Leu Lys Glu Cys Glu Ala Ser Lys Asp Gln Asn Thr Pro Val
                    165                 170                 175

    Val His Pro Pro Pro Thr Pro Gly Ser Cys Gly His Gly Gly Val Val
                180                 185                 190

    Xaa Ile Ser Lys Pro Ser Val Val Gln Leu Asn Trp Arg Gly Phe Ser
                195                 200                 205

    Tyr Leu Tyr Gly Ala Trp Gly Arg Asp Tyr Ser Pro Gln His Pro Asn
        210                 215                 220

    Lys Gly Leu Tyr Trp Val Ala Pro Leu Asn Thr Asp Gly Arg Leu Leu
    225                 230                 235                 240

    Glu Tyr Tyr Arg Leu Tyr Asn Thr Leu Asp Asp Leu Leu Leu Tyr Ile
                    245                 250                 255

    Asn Ala Arg Glu Leu Arg Ile Thr Tyr Gly Gln Gly Ser Gly Thr Ala
                260                 265                 270

    Val Tyr Asn Asn Asn Met Tyr Val Asn Met Tyr Asn Thr Gly Asn Ile
        275                 280                 285

    Ala Arg Val Asn Leu Thr Thr Asn Thr Ile Ala Val Thr Gln Thr Leu
        290                 295                 300

    Pro Asn Ala Ala Tyr Asn Asn Arg Phe Xaa Tyr Ala Asn Val Ala Trp
    305                 310                 315                 320

    Gln Asp Ile Asp Phe Xaa Val Asp Glu Asn Gly Leu Trp Val Ile Tyr
                325                 330                 335

    Ser Thr Glu Ala Ser Thr Gly Xaa Met Val Ile Ser Lys Leu Asn Asp
                340                 345                 350

    Thr Thr Leu Gln Val Leu Asn Thr Trp Tyr Thr Lys Gln Tyr Lys Pro
```

1322

```
            355                    360                    365

     Ser Ala Ser Asn Ala Phe Met Val Cys Gly Val Leu Tyr Ala Thr Arg
         370                 375                 380

     Thr Met Asn Thr Arg Thr Glu Glu Ile Phe Tyr Tyr Tyr Asp Thr Asn
     385                 390                 395                 400

     Thr Gly Lys Glu Gly Lys Leu Asp Ile Val Met His Lys Met Gln Glu
                     405                 410                 415

     Lys Val Gln Ser Ile Asn Tyr Asn Pro Phe Asp Gln Lys Leu Tyr Val
                     420                 425                 430

     Tyr Asn Asp Gly Tyr Leu Leu Asn Tyr Asp Leu Ser Val Leu Gln Lys
                     435                 440                 445

     Pro Gln
         450
```

<210> 1288
<211> 164
<212> PRT
<213> Homo sapiens

<400> 1288
```
     Leu Gln Gln Ala Leu Pro Asn Asn Gly Leu Leu Phe Thr Trp Thr Leu
       1               5                  10                  15

     Ser Lys Glu Gly Gly Arg Glu Gly Gln Ser Gly Val Ser Phe Gln His
                     20                  25                  30

     Ser Ser Gln Lys Gly Glu Arg Phe Ser Gly Trp Cys His Ala Ile Gly
             35                  40                  45

     Ile Lys Gln Glu Ala His Gly Trp Leu Leu Asn Glu Glu Gln Asn Leu
         50                  55                  60

     Gly Ala Leu Trp Leu Thr Thr Ala Ile Cys Gly Ala Gly Thr His Thr
     65                  70                  75                  80

     Ser Arg Gln Leu Gln Phe Cys Thr Phe Ser Leu Leu Asp Ser Lys Ser
                     85                  90                  95

     Arg Cys Cys Leu Ala Ala Leu Arg Gly His Ser Leu Leu Arg Arg Ala
                     100                 105                 110

     Leu Gln Ser Pro Ala Pro Gly Leu Gly Glu Trp Met Arg Leu Leu Pro
                     115                 120                 125
```

```
Tyr Asp Thr Cys Gln Asp Ala Leu Pro Pro Pro Leu Lys Val Gly Pro
    130             135             140

Gly Gln His Cys Ser Leu Leu Ser Ala Phe Ser Gly Leu Arg Ser Gln
145             150             155             160

Tyr Glu Leu Pro
```

```
<210> 1289
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1289
Trp Met Ser Glu Tyr Xaa Gln Trp Val Phe Leu Ile Ser Leu Arg Ile
 1           5               10              15

Cys Leu Arg Val His Tyr Gln Gly Ile Ser Gly Thr Arg Xaa His Ser
            20              25              30

Leu His Gln Phe Leu Arg Val Leu
        35              40
```

```
<210> 1290
<211> 266
<212> PRT
<213> Homo sapiens

<400> 1290
Asp Ile Met Glu Ser Gly Phe Thr Ser Lys Asp Thr Tyr Leu Ser His
 1           5               10              15

Phe Asn Pro Arg Asp Tyr Leu Glu Lys Tyr Tyr Lys Phe Gly Ser Arg
            20              25              30
```

```
His Ser Ala Glu Ser Gln Ile Leu Lys His Leu Leu Lys Asn Leu Phe
         35              40              45

Lys Ile Phe Cys Leu Asp Gly Val Lys Gly Asp Leu Leu Ile Asp Ile
         50              55              60

Gly Ser Gly Pro Thr Ile Tyr Gln Leu Leu Ser Ala Cys Glu Ser Phe
65              70              75              80

Lys Glu Ile Val Val Thr Asp Tyr Ser Asp Gln Asn Leu Gln Glu Leu
             85              90              95

Glu Lys Trp Leu Lys Lys Glu Pro Glu Ala Phe Asp Trp Ser Pro Val
         100             105             110

Val Thr Tyr Val Cys Asp Leu Glu Gly Asn Arg Val Lys Gly Pro Glu
         115             120             125

Lys Glu Glu Lys Leu Arg Gln Ala Val Lys Gln Val Leu Lys Cys Asp
     130             135             140

Val Thr Gln Ser Gln Pro Leu Gly Ala Val Pro Leu Pro Pro Ala Asp
145             150             155             160

Cys Val Leu Ser Thr Leu Cys Leu Asp Ala Ala Cys Pro Asp Leu Pro
             165             170             175

Thr Tyr Cys Arg Ala Leu Arg Asn Leu Gly Ser Leu Leu Lys Pro Gly
         180             185             190

Gly Phe Leu Val Ile Met Asp Ala Leu Lys Ser Ser Tyr Tyr Met Ile
         195             200             205

Gly Glu Gln Lys Phe Ser Ser Leu Pro Leu Gly Arg Glu Ala Val Glu
     210             215             220

Ala Ala Val Lys Glu Ala Gly Tyr Thr Ile Glu Trp Phe Glu Val Ile
225             230             235             240

Ser Gln Ser Tyr Ser Ser Thr Met Ala Asn Asn Glu Gly Leu Phe Ser
             245             250             255

Leu Val Ala Arg Lys Leu Ser Arg Pro Leu
         260             265
```

<210> 1291
<211> 112
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1291
Cys Gly Ser Thr Ile Leu Gln Gly Pro Gln Lys Ala Leu Arg Arg Gly
 1   5   10   15

Leu Gly Glu Val Gly Asp Gln Gly Lys Ser Arg Gln Arg Ala Ser Lys
            20   25   30

Arg Leu Phe Ala Ser Lys Ala Leu Arg Gly His Leu Arg Pro Val Arg
            35   40   45

Gly Gln Gln Pro Gly Arg Xaa Gly Ser Asp Glu Asn Glu Glu Ser Ser
        50   55   60

Val Val Asp Tyr Val Glu Val Thr Val Gly Glu Glu Asp Ala Ile Ser
65   70   75   80

Asp Arg Ser Asp Ser Trp Ser Gln Ala Ala Ala Glu Gly Val Ser Glu
                85   90   95

Leu Ala Glu Ser Asp Ser Asp Cys Val Pro Ala Glu Ala Gly Gln Ala
            100   105   110

<210> 1292
<211> 217
<212> PRT
<213> Homo sapiens

<400> 1292
Gly Ser Thr His Ala Ser Gly Thr Met Arg Ala Ala Ala Ile Ser Thr
 1   5   10   15

Pro Lys Leu Asp Lys Met Pro Gly Met Phe Phe Ser Ala Asn Pro Lys
            20   25   30

Glu Leu Lys Gly Thr Thr His Ser Leu Leu Asp Asp Lys Met Gln Lys
            35   40   45

Arg Arg Pro Lys Thr Phe Gly Met Asp Met Lys Ala Tyr Leu Arg Ser
        50   55   60

1326

```
Met Ile Pro His Leu Glu Ser Gly Met Lys Ser Ser Lys Ser Lys Asp
 65              70              75                    80

Val Leu Ser Ala Ala Glu Val Met Gln Trp Ser Gln Ser Leu Glu Lys
            85              90                    95

Leu Leu Ala Asn Gln Thr Gly Gln Asn Val Phe Gly Ser Phe Leu Lys
            100             105             110

Ser Glu Phe Ser Glu Glu Asn Ile Glu Phe Trp Leu Ala Cys Glu Asp
        115             120                 125

Tyr Lys Lys Thr Glu Ser Asp Leu Leu Pro Cys Lys Ala Glu Glu Ile
    130             135             140

Tyr Lys Ala Phe Val His Ser Asp Ala Ala Lys Gln Ile Asn Ile Asp
145             150             155                 160

Phe Arg Thr Arg Glu Ser Thr Ala Lys Lys Ile Lys Ala Pro Thr Pro
            165             170                 175

Thr Cys Phe Asp Glu Ala Gln Lys Val Ile Tyr Thr Leu Met Glu Lys
            180             185             190

Asp Ser Tyr Pro Arg Phe Leu Lys Ser Asp Ile Tyr Leu Asn Leu Leu
        195             200             205

Asn Asp Leu Gln Ala Asn Ser Leu Lys
    210             215
```

```
<210> 1293
<211> 235
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (229)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1293
Leu His Leu Leu Ala Val Leu Glu Lys Met Ile Ser Gln Gly Asn Asn
 1           5               10                  15

Asn Lys Asn Gly Lys Asn Glu Thr Gly Asn Asn Asn Asn Lys Asp Gly
            20              25                  30

Ser Asn His Lys Ala Glu Ser Gly Ala Leu Ile Glu Ala Ala Lys Ser
        35              40                  45
```

```
Lys Ile His Gln Tyr Lys Val Arg Ala Tyr Ile Gln Met Lys Ser Leu
    50                  55                  60

Lys Ala Cys Lys Arg Glu Ile Lys Ser Val Met Asn Thr Ala Gly Asn
    65                  70                  75                  80

Ser Ala Pro Ser Leu Phe Leu Lys Ser Asn Phe Glu Tyr Leu Arg Gly
                85                  90          .           95

Asn Tyr Arg Lys Ala Val Lys Leu Leu Asn Ser Ser Asn Ile Ala Glu
                100             105                 110

His Pro Gly Phe Met Lys Thr Gly Glu Cys Leu Arg Cys Met Phe Trp
                115                 120                 125

Asn Asn Leu Gly Cys Ile His Phe Ala Met Ser Lys His Asn Leu Gly
    130                 135                 140

Ile Phe Tyr Phe Lys Lys Ala Leu Gln Glu Asn Asp Asn Val Cys Ala
145                 150                 155                 160

Gln Leu Ser Ala Gly Ser Thr Asp Pro Gly Lys Lys Phe Ser Gly Arg
                165                 170                 175

Pro Met Cys Thr Leu Leu Thr Asn Lys Arg Tyr Glu Leu Leu Tyr Asn
                180                 185                 190

Cys Gly Ile Gln Leu Leu His Ile Gly Arg Pro Leu Ala Ala Phe Glu
                195                 200                 205

Cys Leu Ile Glu Ala Val Gln Val Tyr His Ala Asn Pro Arg Leu Trp
                    215                 220

            Leu His Cys Cys Gln
                        235
```

<210> 1294
<211> 275
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

1328

<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1294
Ala Arg Gly Ala Arg Gly Arg Ala Leu Pro Ala Ser Gly Lys Ala Gly
 1   5   10   15

Arg Ala Arg Gly Ser Ala Xaa Gly Ser Ala Ala Arg Gly His Trp Ser
             20   25   30

Leu Ala Arg Phe Pro Ala Pro Arg Gly Ser His Leu Pro Ala Arg Arg
         35   40   45

Xaa Xaa Gly Arg Val Ser Thr Pro Ile Leu Arg Pro Val Ser Ser Ile
     50   55   60

Pro Leu Ala Leu Ser Arg Glu Ser Arg Thr Ala Glu Glu Ser Ser Leu
 65   70   75   80

Thr Pro Gln Pro Gln Val Gly Leu Val His Ile Met Thr Ser Phe Glu
                 85   90   95

Asp Ala Asp Thr Glu Glu Thr Val Thr Cys Leu Gln Met Thr Val Tyr
             100   105   110

His Pro Gly Gln Leu Gln Cys Gly Ile Phe Gln Ser Ile Ser Phe Asn
         115   120   125

Arg Glu Lys Leu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser
     130   135   140

Asn Ile Cys His Tyr Thr Phe Gln Asp Lys Gln Val Ser Arg Val Gln
145   150   155   160

Phe Ser Leu Gln Leu Phe Lys Lys Phe Asn Ser Ser Val Leu Ser Phe
                 165   170   175

Glu Ile Lys Asn Met Ser Lys Lys Thr Asn Leu Ile Val Asp Ser Arg
             180   185   190

Glu Leu Gly Tyr Leu Asn Lys Met Asp Leu Pro Tyr Arg Cys Met Val
         195   200   205

Arg Phe Gly Glu Tyr Gln Phe Leu Met Glu Lys Glu Asp Gly Glu Ser
     210   215   220

1329

```
Leu Glu Phe Phe Glu Thr Gln Phe Ile Leu Ser Pro Arg Ser Leu Leu
225             230         235             240

Gln Glu Asn Asn Trp Pro Pro His Arg Pro Ile Pro Glu Tyr Gly Thr
            245             250         255

Tyr Ser Leu Cys Ser Ser Gln Ser Ser Ser Pro Thr Glu Met Asp Glu
        260             265             270

Asn Glu Ser
        275
```

```
<210> 1295
<211> 677
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (144)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1295
Met Thr Arg Leu Pro Lys Leu Trp Ala Arg Pro Ala Gly Lys Ala Leu
  1             5             10              15

Val Ser Pro Val Val Gln Asn Ile Thr Ser Pro Asp Glu Asp Gly Ile
            20              25              30

Ser Pro Leu Gly Trp Leu Leu Asp Gln Tyr Leu Glu Cys Gln Glu Ala
        35              40              45

Val Phe Asn Pro Gln Ser Arg Gly Pro Ala Phe Phe Ser Arg Val Arg
    50              55              60

Arg Leu Thr His Leu Leu Val His Val Glu Pro Cys Glu Ala Pro Pro
 65             70              75              80

Pro Val Val Ala Thr Pro Arg Pro Lys Gly Arg Asn Arg Ser His Asp
                85              90              95

Trp Ser Ser Leu Ala Thr Arg Gly Leu Pro Ser Ser Ile Met Arg Asn
            100             105             110
```

1330

Leu Thr Arg Cys Trp Arg Ala Val Val Glu Lys Gln Val Asn Asn Phe
        115   120   125

Leu Thr Ser Ser Trp Arg Asp Asp Asp Phe Val Pro Arg Tyr Cys Xaa
        130   135   140

His Phe Asn Ile Leu Gln Asn Ser Ser Ser Glu Leu Phe Gly Pro Arg
145   150   155   160

Xaa Ala Phe Leu Leu Ala Leu Gln Asn Gly Cys Ala Gly Ala Leu Leu
            165   170   175

Lys Leu Pro Phe Leu Lys Ala Ala His Val Ser Glu Gln Phe Ala Arg
            180   185   190

His Ile Asp Gln Gln Ile Gln Gly Ser Arg Ile Gly Gly Ala Gln Glu
        195   200   205

Met Glu Arg Leu Ala Gln Leu Gln Gln Cys Leu Gln Ala Val Leu Ile
        210   215   220

Phe Ser Gly Leu Glu Ile Ala Thr Thr Phe Glu His Tyr Tyr Gln His
225   230   235   240

Tyr Met Ala Asp Arg Leu Leu Gly Val Val Ser Ser Trp Leu Glu Gly
            245   250   255

Ala Val Leu Glu Gln Ile Gly Pro Cys Phe Pro Asn Arg Leu Pro Gln
            260   265   270

Gln Met Leu Gln Ser Leu Ser Thr Ser Lys Glu Leu Gln Arg Gln Phe
        275   280   285

His Val Tyr Gln Leu Gln Gln Leu Asp Gln Glu Leu Leu Lys Leu Glu
        290   295   300

Asp Thr Glu Lys Lys Ile Gln Val Gly Leu Gly Ala Ser Gly Lys Glu
305   310   315   320

His Lys Ser Glu Lys Glu Glu Glu Ala Gly Ala Ala Ala Val Val Asp
            325   330   335

Val Ala Glu Gly Glu Glu Glu Glu Glu Asn Glu Asp Leu Tyr Tyr
            340   345   350

Glu Gly Ala Met Pro Glu Val Ser Val Leu Val Leu Ser Arg His Ser
        355   360   365

Trp Pro Val Ala Ser Ile Cys His Thr Leu Asn Pro Arg Thr Cys Leu
370   375   380

```
Pro Ser Tyr Leu Arg Gly Thr Leu Asn Arg Tyr Ser Asn Phe Tyr Asn
385             390             395             400

Lys Ser Gln Ser His Pro Ala Leu Glu Arg Gly Ser Gln Arg Arg Leu
            405             410             415

Gln Trp Thr Trp Leu Gly Trp Ala Glu Leu Gln Phe Gly Asn Gln Thr
            420             425             430

Leu His Val Ser Thr Val Gln Met Trp Leu Leu Leu Tyr Leu Asn Asp
            435             440             445

Leu Lys Ala Val Ser Val Glu Ser Leu Leu Ala Phe Ser Gly Leu Ser
            450             455             460

Ala Asp Met Leu Asn Gln Ala Ile Gly Pro Leu Thr Ser Ser Arg Gly
465             470             475             480

Pro Leu Asp Leu His Glu Gln Lys Asp Ile Pro Gly Gly Val Leu Lys
            485             490             495

Ile Arg Asp Gly Ser Lys Glu Pro Arg Ser Arg Trp Asp Ile Val Arg
            500             505             510

Leu Ile Pro Pro Gln Thr Tyr Leu Gln Ala Glu Gly Glu Asp Gly Gln
            515             520             525

Asn Leu Glu Lys Arg Arg Asn Leu Leu Asn Cys Leu Ile Val Arg Ile
            530             535             540

Leu Lys Ala His Gly Asp Glu Gly Leu His Ile Asp Gln Leu Val Cys
545             550             555             560

Leu Val Leu Glu Ala Trp Gln Lys Gly Pro Cys Pro Pro Arg Gly Leu
            565             570             575

Val Ser Ser Leu Gly Lys Gly Ser Ala Cys Ser Ser Thr Asp Val Leu
            580             585             590

Ser Cys Ile Leu His Leu Leu Gly Lys Gly Thr Leu Arg Arg His Asp
            595             600             605

Asp Arg Pro Gln Val Leu Ser Tyr Ala Val Pro Val Thr Val Met Glu
            610             615             620

Pro His Thr Glu Ser Leu Asn Pro Gly Ser Ser Gly Pro Asn Pro Pro
625             630             635             640

Leu Thr Phe His Thr Leu Gln Ile Arg Ser Arg Gly Val Pro Tyr Ala
            645             650             655
```

```
Ser Cys Thr Ala Thr Gln Ser Phe Ser Thr Ser Gly Ser Pro Arg Leu
            660                 665             670

Gly Val Arg Gly Arg
        675


<210> 1296
<211> 578
<212> PRT
<213> Homo sapiens

<400> 1296
Gly Thr Arg Glu Gly Ala Arg Val Gly Gly Ala Arg Gly Gly Arg Asp
 1               5               10              15

Gly Arg Lys Met Ala Thr Ala Thr Ile Ala Leu Gln Val Asn Gly Gln
            20              25              30

Gln Gly Gly Gly Ser Glu Pro Ala Ala Ala Ala Val Val Ala Ala
            35              40              45

Gly Asp Lys Trp Lys Pro Pro Gln Gly Thr Asp Ser Ile Lys Met Glu
    50              55              60

Asn Gly Gln Ser Thr Ala Ala Lys Leu Gly Leu Pro Pro Leu Thr Pro
 65              70              75              80

Glu Gln Gln Glu Ala Leu Gln Lys Ala Lys Lys Tyr Ala Met Glu Gln
                85              90              95

Ser Ile Lys Ser Val Leu Val Lys Gln Thr Ile Ala His Gln Gln Gln
            100             105             110

Gln Leu Thr Asn Leu Gln Met Ala Ala Val Thr Met Gly Phe Gly Asp
        115             120             125

Pro Leu Ser Pro Leu Gln Ser Met Ala Ala Gln Arg Gln Arg Ala Leu
    130             135             140

Ala Ile Met Cys Arg Val Tyr Val Gly Ser Ile Tyr Tyr Glu Leu Gly
145             150             155             160

Glu Asp Thr Ile Arg Gln Ala Phe Ala Pro Phe Gly Pro Ile Lys Ser
            165             170             175

Ile Asp Met Ser Trp Asp Ser Val Thr Met Lys His Lys Gly Phe Ala
        180             185             190

Phe Val Glu Tyr Glu Val Pro Glu Ala Ala Gln Leu Ala Leu Glu Gln
```

1333

```
                195                    200                    205

Met Asn Ser Val Met Leu Gly Gly Arg Asn Ile Lys Val Gly Arg Pro
    210                215                220

Ser Asn Ile Gly Gln Ala Gln Pro Ile Ile Asp Gln Leu Ala Glu Glu
225                230                235                240

Ala Arg Ala Phe Asn Arg Ile Tyr Val Ala Ser Val His Gln Asp Leu
            245                250                255

Ser Asp Asp Asp Ile Lys Ser Val Phe Glu Ala Phe Gly Lys Ile Lys
            260                265                270

Ser Cys Thr Leu Ala Arg Asp Pro Thr Thr Gly Lys His Lys Gly Tyr
        275                280                285

Gly Phe Ile Glu Tyr Glu Lys Ala Gln Ser Ser Gln Asp Ala Val Ser
    290                295                300

Ser Met Asn Leu Phe Asp Leu Gly Gly Gln Tyr Leu Arg Val Gly Lys
305                310                315                320

Ala Val Thr Pro Pro Met Pro Leu Leu Thr Pro Ala Thr Pro Gly Gly
            325                330                335

Leu Pro Pro Ala Ala Ala Val Ala Ala Ala Ala Thr Ala Lys Ile
            340                345                350

Thr Ala Gln Glu Ala Val Ala Gly Ala Ala Val Leu Gly Thr Leu Gly
        355                360                365

Thr Pro Gly Leu Val Ser Pro Ala Leu Thr Leu Ala Gln Pro Leu Gly
    370                375                380

Thr Leu Pro Gln Ala Val Met Ala Ala Gln Ala Pro Gly Val Ile Thr
385                390                395                400

Gly Val Thr Pro Ala Arg Pro Pro Ile Pro Val Thr Ile Pro Ser Val
            405                410                415

Gly Val Val Asn Pro Ile Leu Ala Ser Pro Pro Thr Leu Gly Leu Leu
            420                425                430

Glu Pro Lys Lys Glu Lys Glu Glu Glu Glu Leu Phe Pro Glu Ser Glu
        435                440                445

Arg Pro Glu Met Leu Ser Glu Gln Glu His Met Ser Ile Ser Gly Ser
    450                455                460

Ser Ala Arg His Met Val Met Gln Lys Leu Leu Arg Lys Gln Glu Ser
```

```
            465                    470                    475                    480
      Thr Val Met Val Leu Arg Asn Met Val Asp Pro Lys Asp Ile Asp Asp
                      485                    490                    495

      Asp Leu Glu Gly Glu Val Thr Glu Glu Cys Gly Lys Phe Gly Ala Val
                      500                    505                    510

      Asn Arg Val Ile Ile Tyr Gln Glu Lys Gln Gly Glu Glu Glu Asp Ala
                  515                    520                    525

      Glu Ile Ile Val Lys Ile Phe Val Glu Phe Ser Ile Ala Ser Glu Thr
          530                    535                    540

      His Lys Ala Ile Gln Ala Leu Asn Gly Arg Trp Phe Ala Gly Arg Lys
      545                    550                    555                    560

      Val Val Ala Glu Val Tyr Asp Gln Glu Arg Phe Asp Asn Ser Asp Leu
                  565                    570                    575

      Ser Ala
```

```
<210> 1297
<211> 179
<212> PRT
<213> Homo sapiens

<400> 1297
Pro Arg Gly Thr Ser Arg Arg Ser Ala Trp Pro Lys Met Ala Ala Ser
  1               5                  10                  15

Val Cys Ser Gly Leu Leu Gly Pro Arg Val Leu Ser Trp Ser Arg Glu
              20                  25                  30

Leu Pro Cys Ala Trp Arg Ala Leu His Thr Ser Pro Val Cys Ala Lys
          35                  40                  45

Asn Arg Ala Ala Arg Val Arg Val Ser Lys Gly Asp Lys Pro Val Thr
      50                  55                  60

Tyr Glu Glu Ala His Ala Pro His Tyr Ile Ala His Arg Lys Gly Trp
65                  70                  75                  80

Leu Ser Leu His Thr Gly Asn Leu Asp Gly Glu Asp His Ala Ala Glu
                  85                  90                  95

Arg Thr Val Glu Asp Val Phe Leu Arg Lys Phe Met Trp Gly Thr Phe
              100                 105                 110
```

1335

```
Pro Gly Cys Leu Ala Asp Gln Leu Val Leu Lys Arg Arg Gly Asn Gln
        115                 120             125

Leu Glu Ile Cys Ala Val Val Leu Arg Gln Leu Ser Pro His Lys Tyr
    130                 135             140

Tyr Phe Leu Val Gly Tyr Ser Glu Thr Leu Leu Ser Tyr Phe Tyr Lys
145                 150             155                 160

Cys Pro Val Arg Leu His Leu Gln Thr Val Pro Ser Lys Val Val Tyr
                165             170             175

Lys Tyr Leu
```

<210> 1298
<211> 155
<212> PRT
<213> Homo sapiens

<400> 1298
```
Gly Leu Val Thr Ile Phe Gly Cys Pro Ser Arg Glu Lys Gly Arg Met
  1             5                 10                  15

Pro Leu Glu Ser Ser Ser Ser Met Pro Leu Ser Phe Pro Ser Leu Leu
            20                 25                 30

Pro Ser Val Pro His Asn Thr Asn Pro Ser Pro Pro Leu Met Ser Tyr
        35                 40                 45

Ile Thr Ser Gln Glu Met Lys Cys Ile Leu His Trp Phe Ala Asn Trp
    50                 55                 60

Ser Gly Pro Gln Arg Glu Arg Phe Leu Glu Asp Leu Val Ala Lys Ala
65                 70                 75                  80

Val Pro Glu Lys Leu Gln Pro Leu Leu Asp Ser Leu Glu Gln Leu Ser
                85                 90                  95

Val Ser Gly Ala Asp Arg Pro Pro Ser Ile Phe Glu Cys Gln Leu His
            100                105                110

Leu Trp Asp Gln Trp Phe Arg Gly Trp Ala Glu Gln Glu Arg Asn Glu
        115                120                125

Phe Val Arg Gln Leu Glu Phe Ser Glu Pro Asp Phe Val Ala Lys Phe
    130                135                140
```

1336

Tyr Gln Ala Val Ala Ala Thr Ala Gly Lys Asp
145   150   155

<210> 1299
<211> 449
<212> PRT
<213> Homo sapiens

<400> 1299
Ser Asn Arg Lys Phe Ile Pro His Gln Leu Leu Val Ala Ile Asp Leu
 1   5   10   15

Leu Ala Arg Gln Ala Val Arg Tyr Ile Asn Glu Asn Leu Ile Val Asn
            20   25   30

Thr Asp Glu Leu Gly Arg Asp Cys Leu Ile Asn Ala Ala Lys Thr Ser
        35   40   45

Met Ser Ser Lys Ile Ile Gly Ile Asn Gly Asp Phe Phe Ala Asn Met
    50   55   60

Val Val Asp Ala Val Leu Ala Ile Lys Tyr Thr Asp Ile Arg Gly Gln
65   70   75   80

Pro Arg Tyr Pro Val Asn Ser Val Asn Ile Leu Lys Ala His Gly Arg
            85   90   95

Ser Gln Met Glu Ser Met Leu Ile Ser Gly Tyr Ala Leu Asn Cys Val
            100   105   110

Val Gly Ser Gln Gly Met Pro Lys Arg Ile Val Asn Ala Lys Ile Ala
        115   120   125

Cys Leu Asp Phe Ser Leu Gln Lys Thr Lys Met Lys Leu Gly Val Gln
    130   135   140

Val Val Ile Thr Asp Pro Glu Lys Leu Asp Gln Ile Arg Gln Arg Glu
145   150   155   160

Ser Asp Ile Thr Lys Glu Arg Ile Gln Lys Ile Leu Ala Thr Gly Ala
            165   170   175

Asn Val Ile Leu Thr Thr Gly Gly Ile Asp Asp Met Cys Leu Lys Tyr
            180   185   190

Phe Val Glu Ala Gly Ala Met Ala Val Arg Arg Val Leu Lys Arg Asp
            195   200   205

Leu Lys Arg Ile Ala Lys Ala Ser Gly Ala Thr Ile Leu Ser Thr Leu

1337

```
          210                215                220

Ala Asn Leu Glu Gly Glu Glu Thr Phe Glu Ala Ala Met Leu Gly Gln
225                230                235                240

Ala Glu Glu Val Val Gln Glu Arg Ile Cys Asp Asp Glu Leu Ile Leu
                245                250                255

Ile Lys Asn Thr Lys Ala Arg Thr Ser Ala Ser Ile Ile Leu Arg Gly
            260                265                270

Ala Asn Asp Phe Met Cys Asp Glu Met Glu Arg Ser Leu His Asp Ala
            275                280                285

Leu Cys Val Val Lys Arg Val Leu Glu Ser Lys Ser Val Val Pro Gly
        290                295                300

Gly Gly Ala Val Glu Ala Ala Leu Ser Ile Tyr Leu Glu Asn Tyr Ala
305                310                315                320

Thr Ser Met Gly Ser Arg Glu Gln Leu Ala Ile Ala Glu Phe Ala Arg
            325                330                335

Ser Leu Leu Val Ile Pro Asn Thr Leu Ala Val Asn Ala Ala Gln Asp
            340                345                350

Ser Thr Asp Leu Val Ala Lys Leu Arg Ala Phe His Asn Glu Ala Gln
        355                360                365

Val Asn Pro Glu Arg Lys Asn Leu Lys Trp Ile Gly Leu Asp Leu Ser
    370                375                380

Asn Gly Lys Pro Arg Asp Asn Lys Gln Ala Gly Val Phe Glu Pro Thr
385                390                395                400

Ile Val Lys Val Lys Ser Leu Lys Phe Ala Thr Glu Ala Ala Ile Thr
            405                410                415

Ile Leu Arg Ile Asp Asp Leu Ile Lys Leu His Pro Glu Ser Lys Asp
            420                425                430

Asp Lys His Gly Ser Tyr Glu Asp Ala Val His Ser Gly Ala Leu Asn
            435                440                445

Asp
```

<210> 1300
<211> 96

<212> PRT
<213> Homo sapiens

<400> 1300
Leu Met Phe Tyr Val Leu Phe Trp Thr Leu Ser Ser Cys Lys Asn Phe
 1   5   10   15

Tyr Lys Asn Cys Phe Leu His Pro Cys Gly Ala Tyr Ser Ser Glu Pro
             20   25   30

Ser Pro Gln Ser Gln Cys Leu Cys Phe Leu Phe Tyr Phe Cys Ser Ile
             35   40   45

Arg Phe Leu Leu Leu Leu Cys Leu Lys Ser Ser Leu Gly Ser Tyr Gln
     50   55   60

Gly Phe Ser Phe Cys Val Ala Phe Ala Ala Trp Ile Lys His Trp Leu
 65   70   75   80

Thr Val Leu Met Cys Glu Glu Lys Lys Phe Ser Lys Ala Gly Glu Leu
             85   90   95

<210> 1301
<211> 332
<212> PRT
<213> Homo sapiens

<400> 1301
Gly Glu Pro Lys Met Thr Gly Ser Asn Glu Phe Lys Leu Asn Gln Pro
 1   5   10   15

Pro Glu Asp Gly Ile Ser Ser Val Lys Phe Ser Pro Asn Thr Ser Gln
             20   25   30

Phe Leu Leu Val Ser Ser Trp Asp Thr Ser Val Arg Leu Tyr Asp Val
             35   40   45

Pro Ala Asn Ser Met Arg Leu Lys Tyr Gln His Thr Gly Ala Val Leu
     50   55   60

Asp Cys Ala Phe Tyr Asp Pro Thr His Ala Trp Ser Gly Gly Leu Asp
 65   70   75   80

His Gln Leu Lys Met His Asp Leu Asn Thr Asp Gln Glu Asn Leu Val
             85   90   95

```
Gly Thr His Asp Ala Pro Ile Arg Cys Val Glu Tyr Cys Pro Glu Val
        100             105             110

Asn Val Met Val Thr Gly Ser Trp Asp Gln Thr Val Lys Leu Trp Asp
        115             120             125

Pro Arg Thr Pro Cys Asn Ala Gly Thr Phe Ser Gln Pro Glu Lys Val
        130             135             140

Tyr Thr Leu Ser Val Ser Gly Asp Arg Leu Ile Val Gly Thr Ala Gly
145             150             155             160

Arg Arg Val Leu Val Trp Asp Leu Arg Asn Met Gly Tyr Val Gln Gln
            165             170             175

Arg Arg Glu Ser Ser Leu Lys Tyr Gln Thr Arg Cys Ile Arg Ala Phe
        180             185             190

Pro Asn Lys Gln Gly Tyr Val Leu Ser Ser Ile Glu Gly Arg Val Ala
        195             200             205

Val Glu Tyr Leu Asp Pro Ser Pro Glu Val Gln Lys Lys Lys Tyr Ala
210             215             220

Phe Lys Cys His Arg Leu Lys Glu Asn Asn Ile Glu Gln Ile Tyr Pro
225             230             235             240

Val Asn Ala Ile Ser Phe His Asn Ile His Asn Thr Phe Ala Thr Gly
            245             250             255

Gly Ser Asp Gly Phe Val Asn Ile Trp Asp Pro Phe Asn Lys Lys Arg
            260             265             270

Leu Cys Gln Phe His Arg Tyr Pro Thr Ser Ile Ala Ser Leu Ala Phe
        275             280             285

Ser Asn Asp Gly Thr Thr Leu Ala Ile Ala Ser Ser Tyr Met Tyr Glu
        290             295             300

Met Asp Asp Thr Glu His Pro Glu Asp Gly Ile Phe Ile Arg Gln Val
305             310             315             320

Thr Asp Ala Glu Thr Lys Pro Lys Ser Pro Cys Thr
            325             330
```

1340

<400> 1302
Leu His Cys Thr Met Cys Gly Ile Trp Ala Leu Phe Gly Ser Asp Asp
 1   5   10   15

Cys Leu Ser Val Gln Cys Leu Ser Ala Met Lys Ile Ala His Arg Gly
            20   25   30

Pro Asp Ala Phe Arg Phe Glu Asn Val Asn Gly Tyr Thr Asn Cys Cys
        35   40   45

Phe Gly Phe His Arg Leu Ala Val Val Asp Pro Leu Phe Gly Met Gln
    50   55   60

Pro Ile Arg Val Lys Lys Tyr Pro Tyr Leu Trp Leu Cys Tyr Asn Gly
65   70   75   80

Glu Ile Tyr Asn His Lys Lys Met Gln Gln His Phe Glu Phe Glu Tyr
            85   90   95

Gln Thr Lys Val Asp Gly Glu Ile Ile Leu His Leu Tyr Asp Lys Gly
            100   105   110

Gly Ile Glu Gln Thr Ile Cys Met Leu Asp Gly Val Phe Ala Phe Val
        115   120   125

Leu Leu Asp Thr Ala Asn Lys Lys Val Phe Leu Gly Arg Asp Thr Tyr
    130   135   140

Gly Val Arg Pro Leu Phe Lys Ala Met Thr Glu Asp Gly Phe Leu Ala
145   150   155   160

Val Cys Ser Glu Ala Lys Gly Leu Val Thr Leu Lys His Ser Ala Thr
            165   170   175

Pro Phe Leu Lys Val Glu Pro Phe Leu Pro Gly His Tyr Glu Val Leu
            180   185   190

Asp Leu Lys Pro Asn Gly Lys Val Ala Ser Val Glu Met Val Lys Tyr
            195   200   205

His His Cys Arg Asp Glu Pro Leu His Ala Leu Tyr Asp Asn Val Glu
    210   215   220

Lys Leu Phe Pro Gly Phe Glu Ile Glu Thr Val Lys Asn Asn Leu Arg
225   230   235   240

Ile Leu Phe Asn Asn Ala Val Lys Lys Arg Leu Met Thr Asp Arg Arg
            245   250   255

Ile Gly Cys Leu Leu Ser Gly Gly Leu Asp Ser Ser Leu Val Ala Ala

1341

```
                 260                      265                      270

    Thr Leu Leu Lys Gln Leu Lys Glu Ala Gln Val Gln Tyr Pro Leu Gln
            275                 280                 285

    Thr Phe Ala Ile Gly Met Glu Asp Ser Pro Asp Leu Leu Ala Ala Arg
        290                 295                 300

    Lys Val Ala Asp His Ile Gly Ser Glu His Tyr Glu Val Leu Phe Asn
    305                 310                 315                 320

    Ser Glu Glu Gly Ile Gln Ala Leu Asp Glu Val Ile Phe Ser Leu Glu
                    325                 330                 335

    Thr Tyr Asp Ile Thr Thr Val Arg Ala Ser Val Gly Met Tyr Leu Ile
                340                 345                 350

    Ser Lys Tyr Ile Arg Lys Asn Thr Asp Ser Val Val Ile Phe Ser Gly
            355                 360                 365

    Glu Gly Ser Asp Glu Leu Thr Gln Gly Tyr Ile Tyr Phe His Lys Ala
        370                 375                 380

    Pro Ser Pro Glu Lys Ala Glu Glu Glu Ser Glu Arg Leu Leu Arg Glu
    385                 390                 395                 400

    Leu Tyr Leu Phe Asp Val Leu Arg Ala Asp Arg Thr Thr Ala Ala His
                405                 410                 415

    Gly Leu Glu Leu Arg Val Pro Phe Leu Asp His Arg Phe Ser Ser Tyr
                420                 425                 430

    Tyr Leu Ser Leu Pro Pro Glu Met Arg Ile Pro Lys Asn Gly Ile Glu
            435                 440                 445

    Lys His Leu Leu Arg Glu Thr Phe Glu Asp Ser Asn Leu Ile Pro Lys
        450                 455                 460

    Glu Ile Leu Trp Arg Pro Lys Glu Ala Phe Ser Asp Gly Ile Thr Ser
    465                 470                 475                 480

    Val Lys Asn Ser Trp Phe Lys Ile Leu Gln Glu Tyr Val Glu His Gln
                485                 490                 495

    Val Asp Asp Ala Met Met Ala Asn Ala Ala Gln Lys Phe Pro Phe Asn
                500                 505                 510

    Thr Pro Lys Thr Lys Glu Gly Tyr Tyr Tyr Arg Gln Val Phe Glu Arg
            515                 520                 525

    His Tyr Pro Gly Arg Ala Asp Trp Leu Ser His Tyr Trp Met Pro Lys
```

1342

```
            530                    535                    540

Trp Ile Asn Ala Thr Asp Pro Ser Ala Arg Thr Leu Thr His Tyr Lys
545                    550                    555                    560

Ser Ala Val Lys Ala
                565



<210> 1303
<211> 441
<212> PRT
<213> Homo sapiens

<400> 1303
Arg Arg Arg Arg Ala Cys Arg Ser Ala Glu Gly Thr Gly Leu Arg Ser
 1                   5                   10                  15

Leu Leu Leu Pro Pro Arg Leu Gln Leu Pro Ala Gly Pro Phe Ser Arg
             20                  25                  30

Cys Arg Trp Asp Pro Val Ser Ser Pro Arg Pro Ser Thr Met Pro Pro
         35                  40                  45

Lys Lys Gly Gly Asp Gly Ile Lys Pro Pro Pro Ile Ile Gly Arg Phe
     50                  55                  60

Gly Thr Ser Leu Lys Ile Gly Ile Val Gly Leu Pro Asn Val Gly Lys
 65                  70                  75                  80

Ser Thr Phe Phe Asn Val Leu Thr Asn Ser Gln Ala Ser Ala Glu Asn
             85                  90                  95

Phe Pro Phe Cys Thr Ile Asp Pro Asn Glu Ser Arg Val Pro Val Pro
             100                 105                 110

Asp Glu Arg Phe Asp Phe Leu Cys Gln Tyr His Lys Pro Ala Ser Lys
         115                 120                 125

Ile Pro Ala Phe Leu Asn Val Val Asp Ile Ala Gly Leu Val Lys Gly
     130                 135                 140

Ala His Asn Gly Gln Gly Leu Gly Asn Ala Phe Leu Ser His Ile Ser
145                 150                 155                 160

Ala Cys Asp Gly Ile Phe His Leu Thr Arg Ala Phe Glu Asp Asp Asp
             165                 170                 175

Ile Thr His Val Glu Gly Ser Val Asp Pro Ile Arg Asp Ile Glu Ile
             180                 185                 190
```

1343

```
Ile His Glu Glu Leu Gln Leu Lys Asp Glu Glu Met Ile Gly Pro Ile
        195             200             205

Ile Asp Lys Leu Glu Lys Val Ala Val Arg Gly Gly Asp Lys Lys Leu
    210             215             220

Lys Pro Glu Tyr Asp Ile Met Cys Lys Val Lys Ser Trp Val Ile Asp
225             230             235             240

Gln Lys Lys Pro Val Arg Phe Tyr His Asp Trp Asn Asp Lys Glu Ile
            245             250             255

Glu Val Leu Asn Lys His Leu Phe Leu Thr Ser Lys Pro Met Val Tyr
            260             265             270

Leu Val Asn Leu Ser Glu Lys Asp Tyr Ile Arg Lys Lys Asn Lys Trp
        275             280             285

Leu Ile Lys Ile Lys Glu Trp Val Asp Lys Tyr Asp Pro Gly Ala Leu
        290             295             300

Val Ile Pro Phe Ser Gly Ala Leu Glu Leu Lys Leu Gln Glu Leu Ser
305             310             315             320

Ala Glu Glu Arg Gln Lys Tyr Leu Glu Ala Asn Met Thr Gln Ser Ala
            325             330             335

Leu Pro Lys Ile Ile Lys Ala Gly Phe Ala Ala Leu Gln Leu Glu Tyr
            340             345             350

Phe Phe Thr Ala Gly Pro Asp Glu Val Arg Ala Trp Thr Ile Arg Lys
        355             360             365

Gly Thr Lys Ala Pro Gln Ala Ala Gly Lys Ile His Thr Asp Phe Glu
        370             375             380

Lys Gly Phe Ile Met Ala Glu Val Met Lys Tyr Glu Asp Phe Lys Glu
385             390             395             400

Glu Gly Ser Glu Asn Ala Val Lys Ala Ala Gly Lys Tyr Arg Gln Gln
            405             410             415

Gly Arg Asn Tyr Ile Val Glu Asp Gly Asp Ile Ile Phe Phe Lys Phe
            420             425             430

Asn Thr Pro Gln Gln Pro Lys Lys Lys
        435             440
```

1344

<210> 1304
<211> 94
<212> PRT
<213> Homo sapiens

<400> 1304
Glu Lys Lys Arg Gly Arg Glu Asp Lys Pro Gly Thr Met Ala Thr Phe
1   5   10   15

Pro Pro Ala Thr Ser Ala Pro Gln Gln Pro Pro Gly Pro Glu Asp Glu
            20   25   30

Asp Ser Ser Leu Asp Glu Ser Asp Leu Tyr Ser Leu Ala His Ser Tyr
            35   40   45

Leu Gly Gly Gly Gly Arg Lys Gly Arg Thr Lys Arg Glu Ala Ala Ala
        50   55   60

Asn Thr Asn Arg Pro Ser Pro Gly Gly His Glu Arg Lys Leu Val Thr
65   70   75   80

Lys Leu Gln Asn Ser Glu Arg Lys Lys Arg Gly Ala Arg Arg
                85   90

<210> 1305
<211> 82
<212> PRT
<213> Homo sapiens

<400> 1305
Val Ile Leu Glu Met Val Ile Val Phe Cys Leu Val Thr Phe Ala Thr
1   5   10   15

Val Pro Phe Lys Thr Met Trp Lys Pro Gln Val Cys Gly Gln His Arg
            20   25   30

Trp Asn Asp Ile Leu Cys Phe Leu Arg Leu Pro Ser Thr Arg His Ile
            35   40   45

Ser Leu Val Leu Gln Met Ser Ala Gln Val Leu Val Thr Ser Phe Ser
        50   55   60

Cys Cys Pro Gly Lys Ser Val Cys Ala Gly Ala Gly Ala Leu Ala Leu
65   70   75   80

Phe Arg

1345

<210> 1306
<211> 231
<212> PRT
<213> Homo sapiens

<400> 1306
Ala Arg Glu Met Ala Ala Gln Gln Arg Asp Cys Gly Gly Ala Ala Gln
1   5   10   15

Leu Ala Gly Pro Ala Ala Glu Ala Asp Pro Leu Gly Arg Phe Thr Cys
            20   25   30

Pro Val Cys Leu Glu Val Tyr Glu Lys Pro Val Gln Val Pro Cys Gly
        35   40   45

His Val Phe Cys Ser Ala Cys Leu Gln Glu Cys Leu Lys Pro Lys Lys
    50   55   60

Pro Val Cys Gly Val Cys Arg Ser Ala Leu Ala Pro Gly Val Arg Ala
65   70   75   80

Val Glu Leu Glu Arg Gln Ile Glu Ser Thr Glu Thr Ser Cys His Gly
                85   90   95

Cys Arg Lys Asn Phe Phe Leu Ser Lys Ile Arg Ser His Val Ala Thr
            100   105   110

Cys Ser Lys Tyr Gln Asn Tyr Ile Met Glu Gly Val Lys Ala Thr Ile
        115   120   125

Lys Asp Ala Ser Leu Gln Pro Arg Asn Val Pro Asn Arg Tyr Thr Phe
    130   135   140

Pro Cys Pro Tyr Cys Pro Glu Lys Asn Phe Asp Gln Glu Gly Leu Val
145   150   155   160

Glu His Cys Lys Leu Phe His Ser Thr Asp Thr Lys Ser Val Val Cys
                165   170   175

Pro Ile Cys Ala Ser Met Pro Trp Gly Asp Pro Asn Tyr Arg Ser Ala
            180   185   190

Asn Phe Arg Glu His Ile Gln Arg Arg His Arg Phe Ser Tyr Asp Thr
        195   200   205

Phe Val Asp Tyr Asp Val Asp Glu Glu Asp Met Met Asn Gln Val Leu
    210   215   220

Gln Arg Ser Ile Ile Asp Gln
225   230

1346

<210> 1307
<211> 170
<212> PRT
<213> Homo sapiens

<400> 1307
Gln Lys Gln Arg Thr Phe Trp Lys Tyr Tyr Tyr Asp Gly Lys Asp Tyr
 1   5   10   15

Ile Glu Phe Asn Lys Glu Ile Pro Ala Trp Val Pro Phe Asp Pro Ala
            20   25   30

Ala Gln Ile Thr Lys Gln Lys Trp Glu Ala Glu Pro Val Tyr Val Gln
        35   40   45

Arg Ala Lys Ala Tyr Leu Glu Glu Glu Cys Pro Ala Thr Leu Arg Lys
    50   55   60

Tyr Leu Lys Tyr Ser Lys Asn Ile Leu Asp Arg Gln Asp Pro Pro Ser
65   70   75   80

Val Val Val Thr Ser His Gln Ala Pro Gly Glu Lys Lys Lys Leu Lys
            85   90   95

Cys Leu Ala Tyr Asp Phe Tyr Pro Gly Lys Ile Asp Val His Trp Thr
            100   105   110

Arg Ala Gly Glu Val Gln Glu Pro Glu Leu Arg Gly Asp Val Leu His
            115   120   125

Asn Gly Asn Gly Thr Tyr Gln Ser Trp Val Val Val Ala Val Pro Pro
    130   135   140

Gln Asp Thr Ala Pro Tyr Ser Cys His Val Gln His Ser Ser Leu Ala
145   150   155   160

Gln Pro Leu Val Val Pro Trp Glu Ala Ser
                165   170

<210> 1308
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

```
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1308
Cys Ser Cys Thr Val Arg Ala Arg Arg Arg Leu Asn Arg Gly Leu Arg
 1           5                  10                 15


Arg Lys Gln His Ser Leu Leu Lys Arg Leu Arg Lys Ala Lys Lys Glu
            20                 25                 30


Ala Pro Pro Met Glu Lys Pro Glu Val Val Lys Thr His Leu Arg Asp
            35                 40                 45


Met Ile Ile Leu Pro Glu Met Val Gly Ser Met Val Gly Val Tyr Asn
        50                 55                 60


Gly Lys Thr Phe Asn Gln Val Glu Ile Lys Pro Glu Met Ile Gly His
65                 70                 75                 80


Tyr Leu Gly Glu Phe Ser Ile Thr Tyr Lys Pro Val Lys His Xaa Arg
                85                 90                 95


Pro Gly Ile Gly Ala Thr His Xaa Ser Arg Phe Ile Pro Leu Lys
            100                105                110



<210> 1309
<211> 121
<212> PRT
<213> Homo sapiens

<400> 1309
Pro Val Ser Pro Gln Glu Arg Pro Pro Tyr Leu Ala Val Pro Gly
 1           5                  10                 15


His Gly Glu Glu Tyr Pro Val Ala Gly Ala His Ser Ser Pro Pro Lys
            20                 25                 30


Ala Arg Phe Leu Arg Val Pro Ser Glu His Pro Tyr Leu Thr Pro Ser
            35                 40                 45


Pro Glu Ser Pro Glu His Trp Ala Ser Pro Ser Pro Ser Leu Ser
            50                 55                 60


Asp Trp Ser Glu Ser Thr Pro Ser Pro Ala Thr Ala Thr Gly Ala Met
```

1348

```
        65                    70                    75                    80
```

Ala Thr Thr Thr Gly Ala Leu Pro Ala Gln Pro Leu Pro Leu Ser Val
                    85   90   95

Pro Ser Ser Leu Ala Gln Ala Gln Thr Gln Leu Gly Pro Gln Pro Glu
                100   105   110

Val Thr Pro Lys Arg Gln Val Leu Ala
            115   120

<210> 1310
<211> 206
<212> PRT
<213> Homo sapiens

<400> 1310
Gln Cys Pro Gly Arg Ala Gly Ala Pro Gln Thr Arg Ala Pro Arg Ala
  1   5   10   15

Arg Glu Arg Gly Gly Ala Met Ala Thr Ala Asn Gly Ala Val Glu Asn
                20   25   30

Gly Gln Pro Asp Arg Lys Pro Pro Ala Leu Pro Arg Pro Ile Arg Asn
            35   40   45

Leu Glu Val Lys Phe Thr Lys Ile Phe Ile Asn Asn Glu Trp His Glu
        50   55   60

Ser Lys Ser Gly Lys Lys Phe Ala Thr Cys Asn Pro Ser Thr Arg Glu
  65   70   75   80

Gln Ile Cys Glu Val Glu Glu Gly Asp Lys Pro Asp Val Asp Lys Ala
                85   90   95

Val Glu Ala Ala Gln Val Ala Phe Gln Arg Gly Ser Pro Trp Arg Arg
                100   105   110

Leu Asp Ala Leu Ser Arg Gly Arg Leu Leu His Gln Leu Ala Asp Leu
            115   120   125

Val Glu Arg Asp Arg Ala Thr Leu Ala Ala Leu Glu Thr Met Asp Thr
        130   135   140

Gly Lys Pro Phe Leu His Ala Phe Phe Ile Asp Leu Glu Gly Cys Ile
145   150   155   160

Arg Thr Leu Arg Tyr Phe Ala Gly Trp Ala Asp Lys Ile Gln Gly Lys
                165   170   175
```

1349

```
Thr Ile Pro Thr Asp Asp Asn Val Cys Ala Ser Pro Gly Met Ser Pro
            180             185             190

Leu Val Ser Val Gly Pro Ser Leu His Gly Thr Ser Pro Cys
        195             200             205
```

```
<210> 1311
<211> 142
<212> PRT
<213> Homo sapiens
```

```
<400> 1311
Ser Trp Glu Thr Glu Lys Met Gln Thr Ala Gly Ala Leu Phe Ile Ser
 1               5               10              15

Pro Ala Leu Ile Arg Cys Cys Thr Arg Gly Leu Ile Arg Pro Val Ser
            20              25              30

Ala Ser Phe Leu Asn Ser Pro Val Asn Ser Ser Lys Gln Pro Ser Tyr
        35              40              45

Ser Asn Phe Pro Leu Gln Val Ala Arg Arg Glu Phe Gln Thr Ser Val
    50              55              60

Val Ser Arg Asp Ile Asp Thr Ala Ala Lys Phe Ile Gly Ala Gly Ala
65              70              75              80

Ala Thr Val Gly Val Ala Gly Ser Gly Ala Gly Ile Gly Thr Val Phe
            85              90              95

Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn Pro Ser Leu Lys Gln Gln
            100             105             110

Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala Leu Ser Glu Ala Met Gly
        115             120             125

Leu Phe Cys Leu Met Val Ala Phe Leu Ile Leu Phe Ala Met
    130             135             140
```

```
<210> 1312
<211> 495
<212> PRT
<213> Homo sapiens
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```
<220>
<221> SITE
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<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (392)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (460)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1312
Arg Arg Met Glu Gly Gln Asp Glu Val Ser Ala Arg Glu Gln His Phe
 1   5   10   15

His Ser Gln Val Arg Glu Ser Thr Ile Cys Phe Leu Leu Phe Ala Ile
            20   25   30

Leu Tyr Val Val Ser Tyr Phe Ile Ile Thr Arg Tyr Lys Arg Lys Ser
            35   40   45

Asp Glu Gln Glu Asp Glu Asp Ala Ile Val Asn Arg Ile Ser Leu Phe
        50   55   60

Leu Ser Thr Phe Thr Leu Ala Val Ser Ala Gly Ala Val Leu Leu Leu
65   70   75   80

Pro Phe Ser Ile Ile Ser Asn Glu Ile Leu Leu Ser Phe Pro Gln Asn
                85   90   95

Tyr Tyr Ile Gln Trp Leu Asn Gly Ser Leu Ile His Gly Leu Trp Asn
            100   105   110

Leu Ala Ser Leu Phe Ser Asn Leu Xaa Leu Phe Val Leu Met Pro Phe
            115   120   125

Ala Phe Phe Phe Leu Glu Ser Glu Gly Phe Ala Gly Leu Lys Lys Gly
    130   135   140

Ile Arg Ala Arg Ile Leu Glu Thr Leu Val Met Leu Leu Leu Leu Ala
145   150   155   160

Leu Leu Ile Leu Gly Ile Val Trp Val Ala Ser Ala Leu Ile Asp Asn
                165   170   175

Asp Ala Ala Ser Met Glu Ser Leu Tyr Asp Leu Trp Glu Phe Tyr Leu
        180   185   190

Pro Tyr Leu Tyr Ser Cys Ile Ser Leu Met Gly Cys Leu Leu Leu Leu

```
          195                  200                  205

Leu Cys Thr Pro Val Gly Leu Ser Arg Met Phe Thr Val Met Gly Gln
    210             215             220

Leu Leu Val Lys Pro Thr Ile Leu Glu Asp Leu Asp Glu Gln Ile Tyr
225             230             235             240

Ile Ile Thr Leu Glu Glu Glu Ala Leu Gln Arg Arg Leu Asn Gly Leu
                245             250             255

Ser Ser Ser Val Glu Tyr Asn Ile Met Glu Leu Glu Gln Glu Leu Glu
            260             265             270

Asn Val Lys Thr Leu Lys Thr Lys Leu Asp Pro Trp Ser Ser Phe Ser
        275             280             285

Val Leu Gln Ser Pro Val Trp His Phe Ala Ala Gln Thr Pro Ala Asp
    290             295             300

Ile Val Ser Pro Asp Ser His Phe Met Leu Ser Thr Gln Gly Met Ser
305             310             315             320

Trp Ala Gln Leu Val Phe Leu Leu Pro Ala Ser Arg Pro Gly Asn Ser
            325             330             335

Gln Asp Lys Arg Arg Lys Lys Ala Ser Ala Trp Glu Arg Asn Leu Val
        340             345             350

Tyr Pro Ala Val Met Val Leu Leu Leu Ile Glu Thr Ser Ile Ser Val
    355             360             365

Leu Leu Val Ala Cys Asn Ile Leu Cys Leu Leu Val Asp Glu Thr Ala
    370             375             380

Met Pro Lys Gly Thr Arg Gly Xaa Gly Ile Gly Asn Ala Ser Leu Ser
385             390             395             400

Thr Phe Gly Phe Val Gly Ala Ala Leu Glu Ile Ile Leu Ile Phe Tyr
            405             410             415

Leu Met Val Ser Ser Val Val Gly Phe Tyr Ser Leu Arg Phe Phe Gly
            420             425             430

Asn Phe Thr Pro Lys Lys Asp Asp Thr Thr Met Thr Lys Ile Ile Gly
        435             440             445

Asn Cys Val Ser Ile Leu Val Leu Ser Ser Ala Xaa Pro Val Met Ser
    450             455             460

Arg Thr Leu Gly Leu His Lys Leu His Leu Pro Asn Thr Ser Arg Asp
```